Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE II.—PART I.

MR. PRESIDENT AND GENTLEMEN,—I endeavoured to show in my last lecture that Brasdor's operation rests upon a sound pathological basis, so far as this—viz., that we have preparations in sufficient number to prove to us that impaction of clot in the distal end of the artery as it leaves an aneurismal sac is naturally (I do not say necessarily) followed by obliteration of that portion of the sac which is distended by the stream of blood formerly passing up the closed artery; that such obliteration, even when it stops short of the consolidation of the whole tumour, may suffice for the removal of all symptoms of the disease; and that precisely the same effect would follow naturally (but here again I do not say necessarily) on the distal ligature of the same vessel. This being granted, it follows that there are some cases of innominate aneurism which may be completely cured by Brasdor's operation.

The condition of an artery immediately after ligature varies much. In some cases an artery which, like the carotid, runs a long course without branches will be filled with clot from end to end (as in Dr. Wright's case); in others, as in Sir W. Fergusson's, no clot whatever will be contained in it. And the same thing is seen at a later period. Sometimes after division only a very small part of it is obliterated; at others the whole artery between the nearest considerable branches is converted into a solid cord. This must have its effect upon the obliteration produced in the tumour by the distal operation. If the blood is so indisposed to coagulate that after the ligature of the carotid no coagulum forms in the artery, it is probable that coagulation will go on but slowly or imperfectly in the sac. In those cases, on the other hand, where the artery is completely filled with coagulum, the blood in the sac will also show a strong tendency to coagulate: first the ordinary blood-clot will form, and this will subsequently become laminated, as happens after the ordinary operation.

It seems doubtful whether we can entertain the same expectation of complete obliteration of the sac from distal obliteration of the arteries when the tumour is partly aortic. An interesting case is here in point, communicated to the Pathological Society (Trans., vol. xx., p. 118) by Dr. Douglas Powell. In this case an aneurism, arising from the arch of the aorta, and involving that artery from above the origin of the innominate to below that of the left carotid, implicated the innominate in its whole extent, and it must have been impossible during life, as far as I can see by the recorded symptoms, to have diagnosed this from a purely innominate aneurism. After death it was found that the carotid artery had been converted into a solid cord from end to end. The right subclavian was also obliterated at its origin, though this, as I am informed by Dr. Powell, must have occurred very shortly before death, since pulsation in the right wrist, which had been absent during the presence of a considerable effusion into the pleural cavity, returned on its removal, and was perceptible till within a few days of death. Here, however, the circulation through the sac was kept up by the stream of blood traversing the aortic and left carotid orifices, and only a little laminated clot was found at its upper part. This deposit of clot was connected in all probability with the coagulation of blood in the carotid artery. And the analogy of the preparations of innominate aneurism above referred to justifies me, I think, in saying that, in an aortic aneurism also, the obliteration of any of the arteries, such as the right or the left carotid, which lead directly out of the sac, will be followed by consolidation in that part of the sac which is distended by the stream of blood formerly passing up the obliterated vessel.

In vol. ix., p. 83, of the same Transactions, a very interesting case is related by Mr. Mayo, where an aneurism of the arch of the aorta was found to be far advanced towards consolidation, in consequence of the impaction of clot in the main artery. The tube of the aorta was completely closed by this impacted clot, so that not even air would pass up the vessel. This impaction occurred at the usual situation of the congenital malformation; but the clot, though adherent, could still be detached from the wall of the vessel, showing that the obstruction did not arise from that cause. The aneurism was situated below the three great branches, and the enlarged condition of these arteries seemed to be a step in the formation of the collateral circulation. Death was caused by obstruction to respiration produced by pressure on the lung and trachea. Exposure to vicissitudes of temperature, and habits of intoxication, appear to have had a great share in rendering this obstruction fatal. If the man's habits had been different, Mr. Mayo conjectures, with reason, that the aneurism, which was found quite filled with firm coagulum, might have been spontaneously and permanently cured.

Many recorded cases show the severe symptoms which are produced by the distal impaction of clot in cases of aneurism, and the rapid and extensive coagulation which occurs in the aneurismal tumour. Let me call your attention, as an example of this, to a preparation and drawing (from the Irish College of Surgeons) from a case under the care of Dr. Stannus Hughes. I regret that time does not allow me to quote the whole of the very interesting notes which Dr. Hughes has sent me of this case, but I hope they will be fully published elsewhere. Suffice it to say that the patient was a gentleman past middle life, of a gouty habit, who had long laboured under a pulsating tumour, the origin of which, whether from the aorta or one of its great branches, was obscure. He had much improved in health under treatment, and one day after breakfast was about to go out for a drive, having just said that he felt lighter and better in health than for years past, when suddenly he gave a loud cry, exclaiming that he had an excruciating pain in the chest, and felt so cold that he asked to be laid on the hearth-rug before the fire. Dr. Hughes happened to come in at the time, and found the patient in an agony of pain, pointing to the sternum as the seat of it. In a few minutes this pain disappeared, but he was immediately seized with terrific convulsions, in which he died in a few seconds. The dilated aorta and the left ventricle of the heart were found full of recent coagula. The valves were healthy.

We cannot hesitate to attribute these terrible symptoms to the sudden coagulation of the blood in the arterial dilatation, and the intense pain to the stretching of its coats and the resistance offered to the heart's impulse; and many other cases, to which I could give references if time permitted, show the acute symptoms produced by obliteration of a large vessel with impacted clot, and the rapid collection of blood coagulum which follows on such impaction.

There is, then, sufficient pathological evidence to show that an innominate aneurism may be obliterated by the obstruction of its two distal orifices, and to prove generally that the obstruction of an artery as it leaves an aneurismal sac will in all probability be followed by a deposition of firm laminated coagulum in the portion of the sac connected with the obstructed artery, whereby the growth of the tumour in that direction will be stopped. Now, we must always bear in mind that it is not usually the existence of an aneurism, however large, which is dangerous to life, but the growth of an aneurism, however small, in some definite direction. To stop the growth of a small innominate aneurism towards the trachea, or of a small aortic aneurism towards the recurrent laryngeal nerve, would preserve the patient from a danger which cannot be over-estimated, and would be worth much more risk than is involved in tying the common carotid or the subclavian artery. Again, to line any portion of the sac of an aneurism where it is growing and threatening to burst, or compress important parts, is surely a reasonable object for an operation, even if the operation involves danger, and if the rest of the sac remains unconsolidated.

In combating Mr. Wardrop's proposal for reviving the distal operation, Mr. Guthrie endeavoured to show, from the preparations preserved in our museum, that the distal

obliteration of an artery would not cure an aneurism, and I think I ought not to pass over so important an argument, although the data on which it rests are not very extensive. It will be noticed that even in advancing this argument Mr. Guthrie is obliged to admit that such distal impaction is an effort of nature to cure the disease; that is to say, that the disease is partly cured by it, though he did not believe that it could be so entirely.

In treating of the spontaneous cure of aneurism, Mr. Guthrie speaks as follows:—"Two natural processes favouring the cure of aneurism by coagulation have been observed to take place. The first is the enlargement of the collateral branches to such an extent as to enable them to maintain the circulation if the main trunk be rendered impervious. The second is the effort made to close or shut up the lower openings from the aneurism, or those most distant from the heart—an effort which has been hitherto scarcely considered as a natural one, but which is frequently attempted, and often with success." In a further passage he says: "The Hunterian collection supplies several instances of all the openings into an aneurism save the upper one having been closed during life, and I think in sufficient number to establish the fact, that in aneurism of the extremities nature resorts to this method as a part of the curative process; and that although she succeeds in effecting it, still more is requisite to complete the cure by the filling up and obliteration of the tumour. These preparations also show, that when the lower end of the artery has been obliterated the aneurism has not ceased to increase. It is a step which, when once taken, favours the coagulation of the blood; and if a piece of coagulum be separated by accidental violence or other irregularity committed on it by the patient,* or by a state of syncope supervening, or by any other means, the coagulation of the whole of the fluid blood in the tumour may rapidly take place."

The preparations he refers to were numbered in the old catalogue 386, 392, and 397, and are at present numbered 1692, 1709, and 1703. Of the last preparation it will be sufficient to say that Mr. Guthrie clearly misunderstood the description which Hunter gave of it, in consequence of that description being, like so many of Hunter's, merely a short note or heading. His meaning was that the injection did not run through the sac into the artery in consequence of that part of the sac which lies next the artery being filled with clot. But a glance at the preparation shows that there is no obliteration of the lower end of the artery whatever. The bougie placed in it shows it opening freely into the dilatation which is part of the sac. I understand Hunter to have meant (as, indeed, the preparation shows to be the case) that cure had commenced by coagulum forming a barrier between the large sac and the small dilatation behind, which is part of the artery. No. 1709 (formerly 392) has been re-examined, and it is found that the artery, though nearly, is not quite obliterated. Thus, as the process is not complete, we can hardly speculate on its effect, even if the condition of the preparation was such as to admit of a decision on this point, which, however, it is not. The other preparation, No. 1692, in no respect answers to Mr. Guthrie's description as one in which all the openings into an aneurism save the upper one have been closed during life. A slight error is made in the old catalogue, where the obliterated artery is called the brachial, and the aneurism is described as axillary. In fact the artery is the axillary, and the aneurism affected the subclavian, commencing near the point at which the thyroid axis is given off. So that there would be a constant current in the aneurism through the large branches of the subclavian and axillary for anything that this preparation shows. Here, again, only a fragment of the aneurism has been preserved, so that it is impossible to say exactly what effect was produced on the tumour by the obliteration of the axillary; much clot has certainly been deposited in it. But while large branches are left (as was probably the case in this instance) opening out of the sac, it is likely enough that the impaction of clot in even the distal portion of the trunk itself will not cure the aneurism. Even so, however, it may lead to considerable deposition of clot, and may obliterate some part of the tumour, which otherwise would have grown, and possibly burst.

Mr. Guthrie has endeavoured to show that in the cases where Brasdor's operation has proved successful (and that it has been entirely successful in some cases he does not deny, nor that it has in others been partially so), this success has been produced by inflammation propagated from the seat of ligature to the artery, and thence to the walls of the sac. How far Mr. Guthrie would have modified his opinion had the phenomena of impaction of clot in vessels and its results been more fully known to him I cannot say; but I think that anyone who studies his lectures with attention will be of opinion that in this particular his judgment was somewhat misled. It is true that he brought forward the case of Hall, operated upon by Mr. Evans of Belper, and that of the negro operated on by Mr. Montgomery, and succeeded in showing that in both cases inflammation and suppuration in the tumour had followed on the operation. But in Hall's case this inflammation was caused clearly enough by imprudent exposure to accidents in riding and to intoxication after the immediate results of the operation had long passed away; and though the same cannot be said in Montgomery's case, yet suppuration in the sac follows occasionally after the Hunterian as well as after all other modes of treating aneurism, apparently as the result rather of imperfect coagulation within the aneurism than of inflammation of its parietes. Very probably this is more likely to happen after the distal than the proximal ligature, as it certainly seems to be after Anel's than after Hunter's method; but I confess that I fail to see the radical difference on which Mr. Guthrie so much insists. On the contrary, it seems clear that the coagulation in the sac has been more extensive and complete in cases where no inflammatory symptoms have been recorded.

I conclude therefore that there is *a priori* reason to believe that Brasdor's operation may be successfully applied to some cases of aneurism of the innominate artery, and that when applied to aortic aneurisms it may possibly be followed by partial consolidation of the tumour.

Let us now see what the results of distal ligature have been as applied to the treatment of innominate and aortic aneurisms. In order to exhibit the past experience of surgeons in this particular in an accessible form, and to indicate the sources from which information may be derived, I have constructed the accompanying table, which comprises all the cases I have met with. I have not separated the cases of innominate from those of aortic aneurism, since I am sensible that in those cases in which recovery ensued the separation would be merely conjectural.

I do not intend to use this table in a statistical manner. I do not deny that statistics have their useful application in many branches of inquiry, and even in some surgical questions. I would instance the very interesting statistics which a respected predecessor of mine, Mr. Hancock, produced to show the greater safety of resection in disease of the foot, as compared with amputation. This was a comparatively simple question, and the comparison implied was between cases in most respects perfectly similar. On the other hand, everyone knows, and all sound reasoners must have deplored, how statistics have recently been perverted in an attempt to support conclusions of the most doubtful character bearing upon the practice of our hospitals—statistics founded upon the comparison of things differing in so many and such important particulars that any discrepancies in the results of treatment might obviously bear many, and those quite opposite, explanations.

In order to use data such as those of this table statistically, we ought to be in possession of accurate facts both on one side and on the other. For it must never be forgotten that in all surgical questions the statistical method involves a comparison. In the present case, for instance, the comparison would be between treating an aneurism, assumed to be innominate or known to be partly aortic, by the distal operation in one or other of its forms, or by galvano-puncture, or by no treatment at all. For I repeat that the internal treatment should in all such cases have been tried and failed, unless the rapid advance of the tumour proves this to be useless. Therefore, in order to form a judgment, we must have definite data enabling us to compare cases exactly similar and treated in these three ways. But it is obvious that even the most accurate and complete collection of facts can hardly ever suffice for this. And even were there facts which could show us at all what is likely to happen if such tumours were treated by elec-

* This is an interesting hint as to Sir W. Fergusson's proposal of manipulation.

tricity, or what would be about the duration of life and what the urgency of the symptoms if they were left alone, yet the facts on which this table is founded are not, in truth, sufficiently uniform or sufficiently well digested to form the basis of any statistical reasoning. Such reasoning is only then trustworthy and accurate when all possible sources of error have been eliminated, and the facts reduced, as it were, to a common denominator. This is far from being the case in the table before us. Many of the operations were, evidently enough, performed haphazard, on imperfect diagnosis, or as a *pis-aller* in cases where there was no rational prospect of benefit. The results are unknown in some, and imperfectly stated in others; and in many of the fatal cases it remains uncertain whether death was caused by the operation or not, or, in cases of recovery from operation, whether the treatment was really beneficial.

DISTAL LIGATURE IN AORTIC AND INNOMINATE ANEURISM.

No.	Surgeon.	Artery affected.	Date.	Result.	Remarks.
			I.—DOUBLE CONSECUTIVE.		
1	Fearn	Innominate	1836, 1838	Cured	Preparation.
2	Wickham	Ditto	Sep., Dec., 1839	Died: second. hæmorrhage	
3	Malgaigne	Ditto	Apr., Oct., 1845	Died: erysipelas	
4	Bickersteth	Aorta and innominate	May, June, 1864	Died: suffocation	
			II.—DOUBLE SIMULTANEOUS.		
5	Hobart	Aorta	1839	Died: second. hæmorrhage	Subclavian, 1st part.
6	Rossi	Innominate	1843	Died: operatn.	Subclavian, 1st part (?).
7	Heath	Aorta	1865	Recovered	Preparation.
8	Maunder	Ditto	1867	Died: operatn.	
9	Sands	Ditto	1868	Recovered	No benefit.
10	Durham	—	—	—	
11	J. Lane	Uncertain	1871	R.: operation	Ditto.
12	Holmes	Aorta and innominate	1871	Ditto	Ditto.
			III.—CAROTID ONLY.		
13	A. Key	Innominate	1830	Died: operatn.	
14	Neumeister	Ditto	1830	D.: hemiplegia	
15	Scott	Ditto	—	Died: rupture	
16	Dohlkoff	Ditto	1837	Died: paralysis	
17	Hutton	Ditto	1846	Died: suppuration of sac	
18	Wright	Ditto	1855	Died: cerebral abscess	Aneurism consolidated.
19	Ordile	Ditto	18?9 (?)	Died	No particulars.
20	Broadbent	Ditto	1861	Died: second. hæmorrhage	No permanent benefit.
21	Hewson	Ditto	1867	Died: operatn.	
22	Nussbaum	Ditto	—	Died: rupture	
23	Nussbaum	Ditto	—	Ditto	
24	Evans	Innom. and carotid	1828	Cured	Lived 39 years.
25	Morrison	Ditto	1832	Cured	Lived 20 months.
26	Vilardebo or Rompani	Ditto	1844	Died: second. hæmorrhage	
27	Pirogoff	Ditto (?)	—	Recovered.	Imperfect.
28	Mott	Innom. and subclavian	1829	Recovered: temporary cure	Lived 7 months.
29	Fergusson	Ditto	1841	D.: paræmonia	Preparation.
30	Porta	Ditto	1842	D.: erysipelas	No aneurism.
31	O'Shaughnessy	Aorta	1843	Died: galv. puncture	
32	Campbell	Aorta and innominate	1845	Died: suffocation	
33	Knowles	Aorta	1867	D.: apoplexy	
34	Hutchinson, of Brooklyn	Aorta and innominate	1867	Died: suffocation	Double ligature attempted.
35	Rigen	Aorta	1829	Recovered	Left carotid tied.
36	Tillanus	Ditto	—	Recovered	Ditto.
37	Montgomery	Ditto	1829	Died: suppuration of sac	Ditto.
38	S. Lane	Left carotid and aorta	1852	Died: rupture into lung	Ditto.
39	Pirogoff	Ditto (?)	—	Recovered	Ditto.
40	Pirogoff	Aorta and innominate	—	Died: hemiplegia	Ditto.
41	Heath	Aorta	1872	Recovered: much benefit	Ditto.
			IV.—SUBCLAVIAN ONLY.		
42	Wardrop	Innominate	1827	Recovered: much benefit	Lived 2 years.
43	Broca	Ditto	1862	Rec.: ditto	Lived 7 months.

For such reasons I think the mere facts that the death-rate among these cases is enormous, and that the evidence of sound and permanent cure is wanting save in three instances out of the whole forty-three, undeniable as these facts are—and no one wishes less than I do to blink them or to extenuate their importance,—are not of themselves sufficient to found a trustworthy judgment on as to the future applicability of the distal ligature. The novelty of the proceeding, and the great difficulty of ascertaining the indications for operating, are of themselves quite sufficient to account for a record even gloomier than that which I place before you. Let us not forget the early history of ovariotomy. What reliable judgment should we have formed by the statistics (which means usually the percentage of deaths, irrespective of all consideration of any other particulars) of the first fifty tabulated operations of ovariotomy?

A better plan, I think, will be to select those cases from which I can produce reliable histories, trustworthy drawings, or preparations, and endeavour as shortly as possible to see what lesson they teach.

The first part of the table refers to four cases in which the carotid was tied first and the subclavian afterwards, the intervals being two years, six months, ten weeks, and seven weeks respectively.

In one case, the first, of which the preparation is in the museum of this College, I think there can be no doubt that the tumour was checked in its growth by the operation, and that a cure was effected. Being most anxious not to exaggerate the benefits of these operations I shall not hesitate to admit the possibility of a relapse in this instance. But the sac is seen to be solidly coated with coagulum in every part, and there is no reason to doubt that the patient might have lived to the ordinary term of life without any further trouble from the disease; nor is it possible to deny that life was saved by the distal operation. The preparation, however, supports the view which I have previously endeavoured to maintain, that the ligature of the third part of the subclavian necessitates the continuance of circulation through the sac; and if so, the absolute obliteration of the tumour, its radical cure in the strictest sense of the term, making relapse impossible, cannot be obtained by these means. For an innominate aneurism, even when it is not strictly speaking of the tubular variety, but arises from expansion of a part of the wall of the vessel, has hardly ever, if ever, a definite opening or mouth communicating with the innominate, but shares freely in the general circulation through that vessel. Now the ligature of the third part of the subclavian necessitates the continuation of that circulation. In this case you will notice how large the lower portion (or what I call the subclavian portion) of the sac is, and how it has grown down to, displaced, and compressed the trachea, and you will also notice that the obliteration of the carotid artery following on the ligature is not complete, the root of the artery as it leaves the tumour being quite pervious.

Mr. Fearn's case, then, may be accepted as a proof that it is possible by double distal ligature to check the progress of an innominate aneurism and restore the patient to a state of health. I would also call attention to the fact that in every one of the four cases the ligature of the carotid was, in the judgment of the operator, productive of relief, especially when symptoms of pressure on the trachea existed.

It cannot be a fortuitous circumstance that the ligature of the carotid has always been the operation which was first selected. The direct connexion of the artery tied with the sac no doubt ensures much more certainty of producing an effect on the tumour than when the third part of the subclavian is operated on.

In the three later cases the operation was unsuccessful. In Malgaigne's case so much benefit was produced by the ligature of the carotid that it almost seems as if a cure might have resulted under more favourable circumstances; but the patient left the hospital and took to drinking and other debauchery. Death was the result of erysipelas after the second operation, a circumstance purely accidental. In Wickham's case the first operation was productive of much benefit, but the second seems to have had no effect on the disease, and the man died from the rupture of the aneurism. In Bickersteth's the progress of things was much the same, and the man died three months after the last operation from the progress of the disease.

In all these cases the aneurism was innominate, though in Mr. Bickersteth's the aorta was also affected.

The second part of the table contains eight cases, of

which, however, the first two must be separated from the others, as being strictly on the principle of Brasdor's operation—i.e., distal ligature, with no branch between the sac and the ligature.

Such, at least, is the view usually taken of Rossi's case, though it must be allowed that some of the accounts speak of it as being a ligature of the third part of the subclavian. This is a matter of less importance than it would otherwise have been, since the operation proved fatal, and the accounts which have been preserved of the case are so meagre as to render it of little use for any practical purpose.

Hobart's case also unfortunately proved fatal, but it is a case of such unique interest that I must be excused for dwelling on it. "The case was supposed to be one of aneurism of the arteria innominata, and in order to give the patient (a female, aged twenty-five) a chance the distal operation was decided upon. A V-shaped incision was made, one leg of the V being parallel to each of the vessels, and the surgeon without much difficulty came down upon the arteries. The subclavian was tied between the innominata and where it gives off its first branches, and the carotid one inch above its origin. On the fourteenth day after the operation the ligature came away from the subclavian artery without any hæmorrhage, and everything promised a favourable result, especially as the pulsation in the tumour had quite disappeared. On the sixteenth day the patient, a woman of violent temperament, had a quarrel with the nurse, when she jumped out of bed, seized a pillow and some books, and threw them at her. While making these exertions hæmorrhage set in from the carotid, and the patient died shortly after. On post-mortem examination the arteria innominata was found healthy, and the circulation through it had not been stopped, but a pyriform tumour, which grew from the arch of the aorta to the left of the innominata, had overlapped, and to a certain extent had pressed upon, that vessel. It was found that *perfect union had taken place where the ligature had been applied on the subclavian artery*, but a small opening was found in the carotid, through which the hæmorrhage had occurred. The tumour was filled with a firm coagulum. The parts are preserved in the museum of the College buildings, Cork."*

The preparation has been kindly confided to me by the present Dr. Hobart of Cork, the nephew of the operator. Most unfortunately the subclavian artery has been entirely removed. In all other particulars the preparation verifies each detail of the description, and the facts as they are related can be vouched for by living eye-witnesses. But it would have been of singular interest to have seen a definite proof that the first part of the subclavian is susceptible of healthy union after division by a ligature, and that the common impression of the necessary and universal fatality of this operation is incorrect.

As these are the only two cases operated on strictly after Brasdor's method, I must admit that there is at present no instance of the cure of innominate aneurism by this operation; though I cannot entertain any doubt that the operation, if it could be successfully performed, would cure the disease.

OPHTHALMIC NOTELETS.

BY J. F. STREATFEILD, F.R.C.S.

II. WHEN AND WHERE TO IRIDECTOMISE IN CASES OF ANTERIOR SYNECHIÆ REQUIRING AN ARTIFICIAL PUPIL OPERATION.

IN the practical suggestions I have put forth on this subject I have omitted to make a note of exception which had long ago been placed in the memoranda of my note-book, concerning the detachment of anterior synechiæ in iridectomy. If the iridectomy be done at an early period, when the inflammation has subsided and the adhesions in front are quite recent, the iridectomy may be done as well or better at any part of the circumference of the cornea (downwards and inwards?) that may seem to be best, without any regard to the corneal iris adhesions, which will freely separate themselves and cannot re-form subsequently.

In an ordinary long-deferred iridectomy, where there are anterior synechiæ, and the iris is to be removed at a part where these exist, it is torn through its substance, and the part external to the tear is drawn out and excised. It probably bleeds very much, and the more central portion of the iris at the part chosen for the excision is left. Then there are greater probabilities of continuous bleeding from the iris or of a fresh inflammation of it. When, in these cases of adhesions of the iris in front, the operation is done early, and, if necessary, at the part where the adhesions are, the concave pupillary margin reappears in proper form, when and where the traction of the iris forceps is applied, and the iridectomy can extend up to this inner circumference, and an entire segment be removed and some at least of the hateful iris-adhesions are abolished.

But in the proper class of cases for these early iridectomies at any part of the circle—a class which is neither the commonest nor very uncommon,—I would not be misunderstood to mean that all cases in which anterior synechiæ form may be taken in this class and be thus successfully treated by operation. There are some few in which, though operated on early, the iris will only tear from the cornea; and the position of these adhesions in these cases cannot be disregarded, but must be considered beforehand, as they have been by operators in the old way of deferred iridectomies for anterior synechiæ; indeed, when the cases can be diagnosed before the operation is begun, they may be deferred as all have been hitherto.

Where leucoma and anterior synechia follow penetrating wounds or perforating ulcers of the cornea not quite in the centre, and, the aqueous humour being let out, the iris of course falls forward, and not only by apposition then with the back of the cornea becomes glued there, but, being opposite the external opening, it prolapses and becomes impacted or strangulated, as in old iriddesis operations, the iris will then only tear, and cannot detach itself in an iridectomy, which may therefore be deferred. Sometimes these cases are certainly to be diagnosed by the appearance in the white leucoma of a small dark brown patch of uvea there fixed. The iris cannot then be separated as a whole. If we were to suppose a window-curtain to be in part accidentally glued to the shutters, separation might be effected without tearing by drawing the curtain aside; but if also shut in between the closed shutters, the tearing of the curtain must inevitably attend the act of separation. The simile is not perfect, or we must suppose the curtain affixed to the shutter would separate as a perfect whole only before the glue was dry.

III. ON THE ADVANTAGES OF USING TWO SHARP HOOKS WHEN IT IS NECESSARY TO EMPLOY TRACTION IN CATARACT OPERATIONS.

There seems to me to be an increasing number of examples of the surgical instances in which it is found that two similar instruments are better in use than one. If an operator had many hands, instead of only two, it would be, no doubt, of great advantage to him. Some monkeys seem to have, practically, four (or five); but if we want to employ more than two hands we must engage an assistant for a third (or third and fourth) hand, and to him is entrusted the least important parts of the work to be done. Much more may be accomplished by determination and practice with our two hands than is usually done; and an assistant is, at best, a necessary evil in an operation, if he is indispensable. It does not at all interfere with the small movements required of our fingers in an eye-operation if the various little instruments are placed one in each of the interspaces of the first phalanges of the fingers of the left (or right) hand; three at least can be so held, besides the forceps to steady the eye, which is committed to the thumb and forefinger of the same hand; the knife in the right (or left) hand. When each instrument has been used it is laid down, and we have not to wait an instant for the next that is wanted, or to arrange to hold it differently from the way in which it was given into our hand by the assistant. For my part, I frequently, in order to be independent, hold in my right (or left) hand, as well as in the other, more than one instrument, of those that are not sharp or cutting, between the palm of the hand and the ring and little fingers of the same. These remarks and suggestions would, I presume, hardly ever apply in general surgery, with larger instruments and more considerable movements of the hands

* Flood "On the Arteries," edited by Dr. Power, Dublin, 1860, p. 134.

and fingers in the operations. In eye-operations it is almost always best to be behind the head of the patient, lying on a high couch, with his feet in a well-lit window; and in operating, as in an ophthalmoscopic examination, it is best to stand, for then our movements are more freely made, not only from side to side, but by raising or lowering the head, so that the eye of the patient may be viewed in all directions and in various lights, as may be necessary, and this without approaching to or receding from the subject of the operation. Most eye surgeons prefer to sit down when operating or in an ophthalmoscopic examination; and for this purpose, in operating theatres and ophthalmoscopic rooms, at the hospitals at least, music-stools are provided: in operations, by way of getting, in some degree, the use of a third hand, I generally screw up this stool to a convenient height, and put my left (or right) foot on it, and, the patient's head being covered with a towel, I rest it against my knee to steady it; the wrist of the hand with which I am operating being also engaged in the operation on the other side, to aid in preventing any little unexpected movements of the head of the patient. I do not know that I could make any greater use of my own abilities in order to acquire a complete independence. Two fingers of the left (or right) hand are all-sufficient to hold open, and keep apart, the lids, and at the same time to steady the eye in any operation in which no considerable opening is to be made in it, as in cataract-solution operations, when one needle only, in the right (or left) hand is to be used. But, if an incision is to be made in the coats of the eye, the pressure required to be made upon them by the two fingers, which are placed actually on the eye, on the ocular conjunctiva and the margin of each of the two separated lids, would be too much for safety, and then a spring speculum and fixing forceps must be submitted to. If the middle and ring fingers are thus used, their soft ends are put between the lids and upon their margins and then separated, and with them the globe of the eye is pressed sufficiently backwards to secure its not moving, the forefinger and thumb of that hand being still available. When an eye is fixed thus with two fingers, it is much more securely fixed than by means of any ordinary fixing forceps, which holds the eye at one point only of the mucous membrane, and, as this coat is loosely attached and easily torn, the instrument will only ineffectually prevent some of the movements effected by the rectus muscles, much less will it restrain the rotatory movements of the obliqui. Impressed with this defect of our fixing forceps, wishing to have the eye to be operated on more completely under my command, and considering that only *two* fixing forceps could effect my purpose, I, some years ago (Ophthalmic Hospital Reports, iv., 100), had forceps made which control *all* the movements of the eye completely; each blade is bifurcated with a U-shaped extremity, the width apart of the two ends of either blade being equal to one and a half or two diameters of an ordinary cornea, so that with it the eye is secured at *two* opposite and far apart points, by holding with it the conjunctiva and subconjunctival tissues at the customary most convenient distance from the margin of the cornea. These double ends (for the two blades of any forceps only supplement one another) are equivalent to *two* similar instruments. But the forceps must be carefully regulated in use, that the two ends be neither dragged upon nor depressed unequally; but, as we have no more than two hands, it is useful that the forceps may only employ one of them. The double hook used in general surgery in excising tumours is preferred to two hooks in separate handles for the same reason and for other reasons, one of them being that there is less chance of the double hook tearing out, as the force of the traction is halved, or unequally divided (as it is in the case of my double-ended forceps). When two separate and duplicate instruments can be used together, one in each hand, it is often very advantageous; it is no longer a question of economy of hand-power, but traction is halved, or any other specific action of the two instruments is divided between them, and the action of either of them can be, and should be, always made supplementary to, and regulatory of, the action of the other, its opponent or co-adjutor. With one hand one instrument "plays into the hand" of the other. When the best of all instruments only are used, "two are better than one." In the final stage of enucleation *two* fingers are better than forceps, with which to move, or fix, and guide, and retain the eye-ball—better even than more than two fingers, which are unnecessary, and probably in the way. *Two* hands are similarly useful in removing very large tumours.

Two opposite iridectomies are often advantageous when one is insufficient; so that, in these later times, two are sometimes made at once, opposite each other, in the same eye, at the same time of operating; sometimes even the corneal openings are made simultaneously with *two* broad needles, one in each hand, to avoid the escape of the aqueous humour by the first-made opening, when they are made separately, with an interval, however brief it may be, of delay. I am not now concerned in the consideration of the advantages of double iridectomies or other double or single (e. g., squint) operations, but only in the advantages of using two similar instruments (in one or two handles) in some cases in which the objects of the operation, and how it is to be done, have been long ago determined.

There is a little-used, old-fashioned instrument in cataract instrument cases which has held its place in all the vicissitudes to which extraction operations have been subject of late years; for it is supposed to be sometimes indispensable, although as it is generally employed (too late to be of use) it might as well be absent. I mean the "sharp hook." *It is really a useful instrument; but we ought always to have not one but two of them for use together, and begin to employ them soon enough in the (unpromising) operation cases in which the sharp hook or some other traction instrument has been hitherto made use of as a last resource.* When I say *soon enough*, I am embarrassed by the conviction that I cannot quite define when the need for the instrument (instruments) has arisen. In mere operating practice is very much, and we learn to appreciate symptoms without bringing our minds even to the effort to describe them. Still, I think I can make this clear: when the need for a sharp hook (or of two sharp hooks) has arisen, the two sharp hooks are infinitely better, not only than one, but also than any spoon or scoop, or any other of the traction instruments, which are still used in these cases of emergency by all the best operators, although the practice of "out-scooping" cataracts has been long abjured by them.

The common sharp hook is as fine as may be to have sufficient strength and stiffness, though not much of either is required: it tapers, very gradually, from its proximal end in the handle to the very sharp point of the end hook. This hook is of about one-twentieth of an inch, and somewhat C shaped; but the hook does not form more than one-third of a circle altogether. It was never much used, but its occasional use has never been abandoned. It was called for when the lens, in extraction of cataract, receded into the vitreous chamber instead of coming forwards in the regular way. In flap-extraction this recession, when it occurred, was as rapid—often instantaneous—as was the advance of the lens in a successful course. If it descended it was lost to view; and yet the operator, armed with the sharp hook, would seek for it, and then he abandoned the attempt, and there the lens was left and the eye closed. When a suicide has thrown himself into the water we do not "drag" the river with but one hook. The operator may sometimes have succeeded in hooking the lens, more probably the retina, but of course he would not so be able to hold it. As I do not now operate by the flap-extraction, I need not determine exactly what I should do in it; but if I could not see the lens I think I would not seek for it, and if I could see it I would not attempt to hold and extract it with one hook only.

To proceed to von Graefe's extraction and my own experience. In the various stages of this operation, and under anæsthetic influence, there is no such need for hurry nor any such cause for sudden alarm: all is much more leisurely and safe. The lens advances slowly and gradually, gets a little more than half outside the corneal opening (and then it cannot recede); or it does *not* advance but a very little way, or not so far at least as to be half outside the corneal opening, and then, soon, pressure being still kept up, it will recede, and the vitreous advance. If the lens does not advance (and the corneal opening does not require enlargement) or begins to recede, or advances a little and then begins to recede, I take two of the sharp hooks, one in each hand, and, inserting one and then the other in the corneal opening, with the convexity of the hook downwards, pass them, held in the same way, both some distance directly back into the vitreous chamber and

behind the lens till both are considerably past the middle of its back surface; then a slight rotation in the right direction (the necessary amount—a quarter—to be observed and calculated before the hooks are introduced, for their ends cannot now be seen) of the two instruments, one in either hand, brings them towards the lens. Their hooked extremities, being brought somewhat forward and then in a direction as if to withdraw them from the eye, are securely caught in the lens at its lower third or below the centre. From the moment when the lens is first caught in this way by one or other of the hooks, as at the same time a movement to withdraw them, and the lens of course with them, is made, the lens will rotate a little and incline to the right or left, and then we begin to appreciate the advantage of having two hooks, each one to aid the other: the lens, meeting with some slight resistance to its being withdrawn and removed from the eye, would inevitably fall off on one side or the other of the single hook, and the result would be worse than *nil*, for not only would the lens be lost, but it would be more or less comminuted, and so become more difficult of removal. Of course the two hooks may get a good anchorage in the body of the lens at the same instant, and this regulatory movement with the second hook may not be required. We have, in the next place, only slowly and very observantly, to withdraw the two hooks equally together, and the lens on them; withdrawing a little more, comparatively, the one or the other of the hooks accordingly as one observes the lens to make a slight beginning of a rotation towards that hook, so as to stop that rotation and make the lens advance straightforwardly to its complete extraction. The patient, meanwhile, is kept profoundly under the influence of the anæsthetic, and if the eye is inclined to roll upwards, it is held down by fixing-forceps committed to the hands of an assistant.

Thus much concerning what I have called the "regulatory" action of the second (either) sharp hook. As to the "supplementary" action of the same I would explain it by a reference to a case in which I failed for want of it—i.e., a second hook. It was some years ago, but I remember it very well because of the extraordinary end of the case. It was at University College Hospital, and I had not a second sharp hook, because one is now generally, and was then universally, supposed to be all-sufficient. At this hospital we have all necessary instruments, all that can be required—a complete set; but at Moorfields, where I first used a *second* sharp hook, I could have it without ordering it, because, with so large an ophthalmic staff, and so many instruments constantly under repair, there are duplicates of all kinds. In the case at University College Hospital, all had gone well at the beginning of the operation; the cataract was mature, there were no unfavourable symptoms, the globe was not soft, it was an ordinary senile cataract, commencing to form also in the other eye, and there were no posterior synechiæ, etc. But the lens, I do not know why, would not come forward but a very little, and soon began to go back, until the lower half of it was hidden behind the lower part of the iris. Some vitreous humour escaped, and the lens seemed inclined to descend lower and out of sight. I took the sharp hook, put it behind the lens in the vitreous chamber, and secured it and brought it forwards and upwards at last; then I essayed to bring it out, but it rotated and swayed from side to side, comminuting the back surface of the lens and detaching fragments which must be left behind. In order to make sure of not losing the lens altogether I had to keep the single sharp hook very firmly pressed into the lens, and, just as I thought I could extract it as a whole, it broke into two, and I brought out one half which was in front of the hook. (This would not have been so, I believe, if the pressure and traction had not been necessarily so great, and all at *one* place.) The other sank low down in the pupil, and another gush of the vitreous humour occurred. I was now afraid to attempt the removal of the second half of the lens, for it had become so much involved in the vitreous humour, and I did not think I could hold it with the (one only) instrument of whose powers, in my hands, I had just been making trial. So I was glad to close and bandage the eyelids. The extraordinary end of the case is, that the man gained at last, and has at the present time, a perfect eye as regards vision. The half of the cataract, and the fragments also remaining in the eye, involved in the vitreous humour, rose towards the corneal opening and left a considerable space below them, and above the iris, of free pupil. In this situation they were found when I examined the eye next after the operation (the corneal opening was then already united and healed) and so they have remained ever since, only somewhat shrunken in the course of time. I think I could have removed the lens whole if I had had two sharp hooks to divide the pressure and dragging force between them, to prevent the sideways rotation and swaying to and fro of the lens, and the comminution and final split into two. All this a second sharp hook would have done for me, had I known it then and provided myself with a second hook. So would a spoon or scoop, some will say; but I will not omit to speak of the *comparative* advantages of the two hooks.

The two fine hooks occupy no appreciable amount of space in the corneal opening; they do not comminute the lens as one hook does, they transfix and hold the lens (it does not merely lie on them as a lens lies in the spoon or scoop which is used by most operators on these occasions), so that it can be brought out straightforwardly without need (or fear) of compressing it against the back of the cornea *and some part of the iris, perhaps between them.* It is as different in practice as it is to land a fish with a gaff rather than to secure him only in a landing-net; the sense of safety and power is so very unlike in the two cases; it is a triumph even *before* the complete extraction of the lens which had threatened to escape, and a feeling very unlike that afforded by the partial security of a single hook or the danger of a scoop retaining the lens. Some soft cortical lens matter is almost certain to be left to be removed after the main body, nucleus, &c., of the lens is extracted; but this is commonly the case in all Graefe's extraction-cases, and the main body being out of the way, this soft lens matter may be extruded with a curette, as in other cases of extraction (or, at least, it should be attempted) in which there has been no mishap, or any fear of one. The rotatory tendency in a lateral direction, of which I have said so much in order to its prevention by using the two sharp hooks instead of one only, and by drawing one or the other of them a little more or less during the extraction—this very rotation which I have tried to avoid by all means, may be utilised in the final stage of the extraction when the lens is almost loose from the eye, by watching the opportunity of any inclination that it may have to rotation, and then turning it out so, sideways.

The advantages I have found in the use of the two sharp hooks I have described, in the cases in which, with a sufficiently large corneal opening, the lens will not advance, or having advanced a little way will not proceed through the opening, but seems rather inclined or has begun to recede, and the vitreous humour instead of it inclined to advance, are—that an extraordinary amount of power is obtained, so that the lens cannot but be extracted; that it may be so well guided by a little more traction on one or other of the hooks; that by them it can be drawn straight out through the external opening without any harmful dependence and pressure upon parts opposite the traction instruments—the cornea and iris, against which the lens is often thrust violently in extracting by means of a spoon or scoop.

In a case recently at Moorfields, in which I operated for cataract in my usual way, von Graefe's method with my modifications—for every one now adopting this method of extraction has some particular fancies in which he allows himself to depart from the exact rules of the master,—all had gone well, and the corneal section was of fair size, but the lens after a little advance stopped, and beside it at one angle of the wound a prominent bead-like protuberance of the vitreous humour showed itself. I of course remitted all pressure with the curette; the vitreous protuberance remained. With the two hooks I drew the lens straight out through the opening in the way I have described; the vitreous humour retired altogether, and none of it was lost. This is almost the only case I know in which by any method when some vitreous humour has protruded so decidedly in an extraction-operation, the lens has been then afterwards extracted without loss of any portion of the vitreous humour. But if, as in most of my cases in which in alarm I have used the two hooks, some small portion of the vitreous humour is lost, and the lens has been extracted before or afterwards, it is very much better and more certainly done, I believe with the two very fine little sharp hooks than

with a single larger instrument, and probably much more disturbance and compression of the neighbouring parts, besides the other disadvantages of a larger instrument and of one only.

CASE OF RUPTURE OF THE HEART.

By D HUGHES, M.D., F.R.C.S. Ed.,
ASSISTANT-SURGEON 14TH B.N.I., CAMP KOLAPORE.

Bheestie Theile Abeloola, F Company H.M. 14th Regiment N.I., died suddenly in his house between one and two o'clock A.M. on the 4th of May, and on the same day a Court of Inquest was held, at which the following facts were elicited:—

The deceased, who had been in his usual health, and worked hard all day, after partaking of a meal of dhall and rice, retired to rest about 9 P.M. on the 3rd of May. At midnight he awoke his wife, and complained of feeling very sick; in about an hour's time he became very ill indeed, and his wife, being alarmed, called in a neighbour, who, seeing that the illness was serious, sent to the hospital for assistance. Shortly after the despatch of the messenger, and before the hospital-assistant could reach the house, the patient died. Before his death he complained of a pain as if his liver were being torn to pieces, and asked to be supported in a sitting posture, as his breathing was oppressed. On being raised he fell forwards, and when lifted up again almost immediately fell backwards and expired. The deceased was about thirty-six years of age at the time of his death, and had never complained to any one of pain in his chest.

Autopsy, six hours after death.—Rigor mortis present. The body was muscular and well nourished, and free from marks of violence. There was a fair quantity of subcutaneous fat. On opening the chest, the lungs were found pale and collapsed. The pericardium was greatly distended, and when opened was found to be full of fluid venous blood. When a sufficient quantity of this blood had been soaked up by a sponge, to allow a clear view to be had of the heart, a rent, half an inch in length, and about midway between the apex and base, was observed in the wall of the right ventricle, close to, and parallel with, the longitudinal sulcus. The heart was then carefully removed from the thorax for further examination. The right ventricle was much dilated, its walls soft and thin, especially in the vicinity of the rupture, and very pale. So soft and thin were they that when the organ was pressed during the manipulations necessary for its removal from the body, and some of the contained blood squeezed through the rupture, the rent was extended for about a quarter of an inch, and the wall as it were collapsed. The valves, both tricuspid and pulmonary semilunar, were incompetent. The cavity contained a few small clots and fluid blood. The right auricle and the chambers on the left side were fairly contracted. The valves of the left ventricle were free from disease, but the walls were softer and paler than usual, this condition being due to fatty degeneration. The aorta was healthy. A cursory examination was made of the abdominal organs *in situ*, and they were found to be natural in appearance.

Remarks.—Rupture of the heart is more common in males than in females, and seldom occurs in persons under forty years of age. Even then it is rare, and rupture of the right side of the heart from disease is especially so. The cardiac walls, as a rule, give way under strong emotion or great physical exertion, and death is generally almost instantaneous. In this case the rupture occurred while the sufferer was asleep, or at least at rest, and death did not take place till considerably more than an hour after its occurrence. The mischief probably began at midnight of May the 3rd, when the patient first complained of sickness, due, no doubt, to the shock occasioned by the giving way of the ventricular wall. As the rent in the heart increased, and the blood flowed more freely, the pericardium became distended, causing the tearing pain described by the patient as in the liver* and the heart's action became embarrassed, causing dyspnœa. When the effusion of blood had become considerable the heart could no longer perform its functions, and the patient died.

I was unable to secure the heart for microscopic examination, but I am tolerably certain that the whole organ was affected with fatty degeneration. The right ventricle, however, was so much softer and more friable than the other chambers that I am inclined to believe that it was affected with true ramollissement.

Camp Kolapore, May, 1872.

* Natives ascribe every acute internal pain to the liver (which in the East is the seat of the affections, corresponding in that sense to the Western "heart"), and have very hazy ideas as to the exact locality of that organ; consequently we may assume that the pain alluded to was actually in the cardiac region.

TOXICOLOGICAL GLEANINGS.

By C. MEYMOTT TIDY, M.B.,
JOINT LECTURER ON CHEMISTRY AND PROFESSOR OF MEDICAL JURISPRUDENCE AT THE LONDON HOSPITAL.

A few poisoning cases of interest have occurred in my practice that I should wish to put on record.

1. A case was referred to me last July by Mr. Richards, deputy-coroner for Middlesex, where J. H. G——, a girl unmarried, had died somewhat suddenly, and under somewhat suspicious circumstances. Dr. Lawrence Gill, of Bow, at the post-mortem examination, found that she was eight months advanced in pregnancy. The symptoms from which she was suffering when he was first called to see her were as follows. She was unable to swallow, the teeth being tightly clenched. There were convulsions, the legs stiff, and the body slightly arched forwards. The stomach was sent to me for examination, as well as a bottle containing a mixture the girl had taken a short time before death. From the symptoms both Dr. Gill and myself quite expected to find strychnia. There was, however, no evidence whatever of its presence, but we discovered, both in the mixture the girl had taken and in the contents of the stomach, large quantities of savin, from the effects of which there was not a doubt death had resulted. It is somewhat curious the marked similarity in this case between the symptoms produced by savin with those ordinarily found in cases of strychnia poisoning.

2. The second case I wish to note was referred to me last month (May, 1872) by Mr. C. C. Lewis, coroner for Essex. The deceased was a labouring man in the employ of Messrs. Howards, of the Stratford Chemical Works. Not feeling very well, he went into the warehouse, for the purpose of taking a dose of aperient mixture, when, by mistake, he helped himself to a dose of concentrated ague mixture, containing, as I found, about 85 grains per ounce of quinoidine. So far as we can learn, the man must have swallowed about two ounces of the mixture, or 170 grains of the quinoidine. Immediately after he had drunk it he was taken violently ill with excessive vomiting, and died in about half an hour after the dose had been swallowed.

Dr. Kennedy, of Stratford, made the post-mortem examination, which disclosed a highly congested state of the brain. The right pleura was adherent. The lungs showed the man at the time of death to be suffering from the first stage of pneumonia. The heart, too, showed signs of fatty degeneration.

The stomach forwarded to me by Dr. Kennedy was generally congested with patches of much deeper congestion, and contained about an ounce and a half of a brown liquid, which I found, upon examination, to contain a similar drug to that marked "ague mixture."

This, so far as I know, is the first case on record of death resulting from any of the cinchona alkaloids. I do not regard it as a pure and simple case of poisoning, because of the bad state of the man's general health, disclosed both by the post-mortem examination and by his previous history.

3. The last case I wish to mention was referred to me by Mr. Humphreys, coroner for Middlesex, on the 25th of May, 1872. Two sailors, just returned from a coasting voyage, asked their landlady to procure them two black draughts at a chemist's shop near at hand. Each man took a draught, and both fell ill very shortly after having taken them. One, according to the evidence, had intense vomiting of a thick dark-brown liquid. There were also certain nervous symptoms present. The man, however, ultimately recovered.

The other sailor died. The contents of the stomach were sent to me for analysis. They gave an intensely acid reaction, very marked even when diluted very largely with water. Analysis proved that there was present a large quantity of oxalic acid. The man was seen by Dr. Nightingale, of Limehouse, about two hours after he had swallowed the draught. He found him in a complete state of coma. The symptoms (according to Dr. Nightingale, to whom I am indebted for complete notes of the case) set in in about a quarter of an hour after having taken the draught. The man died in about five hours, the loss of consciousness apparently being complete to the last. The post-mortem revealed nothing specially to be remarked except intense congestion of the vessels of the brain.

The case is instructive as illustrative of the remarkably anomalous effects occurring in poisoning by oxalic acid, the symptoms in this case being marked coma.

Cambridge-heath, Hackney, June, 1872.

ECTROTIC TREATMENT OF SMALL-POX AND SCARLET FEVER.

BY ALEX. T. WATSON, M.D., M.R.C.S. EDIN.,
LATE LIEUT.-COLONEL SURGEON-IN-CHIEF OF DIVISION, U.S.V. ARMY.

JUNE 2nd, 1872.—Miss Ada T——, aged eleven, complained of headache and general febrile disturbance, which continued during the 3rd, 4th, and 5th.

6th.—On this afternoon I was called to see the patient, and found the face swollen and covered with an elevated papular eruption, extending over the neck, also on hands and wrists, irritability of stomach, intolerance of light, delirium, intense itching of skin of face and hands, hard dry cough. An enema was ordered, and the patient to be sponged with tepid carbolic-acid soapsuds, and afterwards to have five grains of Dover's powder.

7th.—The entire surface of the body and extremities thickly covered with papular eruption, face and hands greatly swollen, high fever. There is no mistaking the case; it presents every appearance and well-marked symptoms denoting a severe attack of confluent small-pox. The papulæ on the face and backs of hands are forming into vesicles. To be sponged with warm carbolic-acid soapsuds, and immediately afterwards the whole body to be painted over with "glycerinum acidi carbolici" (B.P.), applied with a large camel's-hair brush. Some smarting was occasioned on the parts that had been scratched, but otherwise only a general glow of warmth. Five grains of Dover's powder given to allay irritability; soon afterwards the patient fell into an uninterrupted sleep for several hours. To be sponged in the evening with tepid carbolic soapsuds.

8th.—No vesicles visible, no trace to the touch of papular eruption, no inordinate heat of skin; dark-brown spots occupy the position where the papulæ had been; the swelling of face and hands much subsided; tongue cleaning. The patient's diet to be milk and soda-water, and to be sponged every three hours with tepid carbolic-acid soapsuds.

9th.—The dark-brown spots visible, but otherwise no trace of disease; patient complains of hunger. In addition to soda-water and milk, to have chicken soup and bread; craves to have some of the breast of the chicken. Continue sponging.

10th.—Convalescent, and requests to be allowed to get out of bed.

13th.—Miss May T——, aged thirteen, having gone through with almost the identical symptoms as in her sister's case, the eruption duly appeared, and of the same confluent character.

16th.—Master Norman T——, aged five; same symptoms.

19th.—Miss Gertrude T——, aged fifteen; same symptoms.

21st.—Miss Alice T——, aged two; same symptoms.

It would be needless to give in detail the daily symptoms and treatment of the four above cases, as in every respect it would be a recapitulation of Miss Ada's case. I may add, however, that the glycerinum acidi carbolici was applied in all the cases immediately on the appearance of vesicles being formed, and that the application had only to be made once. They all bore marks of having been thoroughly vaccinated. The atmosphere of the bedrooms was kept constantly saturated with the vapour of carbolic acid, by means of sheets hung up in place of doors and windows, and constantly wetted with a solution of the acid.

25th.—The dark-brown spots fade daily. The patients are all convalescent and have gone to the suburbs of the city.

Early in February, 1872, I was in attendance on several cases of scarlatina in the family of Major A——, in which I made use of baths of carbolic-acid soapsuds, and was forcibly impressed with the mild course of the disease; in contradistinction to that of cases occurring in the same street, and in the opposite house, where, out of a family of four children, three died. In the next cases I attended, carbolic acid was added to the soapsuds, and with most satisfactory results.

Dresden, June 26th, 1872.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

EPITHELIOMA OF RIGHT THIGH; NECROSIS OF FEMUR; AMPUTATION; RECOVERY.

(Under the care of Mr. BRYANT.)

DURING the last three months some interesting cases of cancerous growths affecting the lower extremity have been under the care of Mr. Bryant at Guy's Hospital. In each case there is a history of necrosis of the bone of the part, and epithelial cancer appears to have commenced in the cicatrix and then spread, involving the soft tissues of the bone. We insert this week two of three cases, for the notes of which we are indebted to Mr. W. Cock, ward clerk.

E. A——, aged forty-eight, was admitted May 8th, with the following history:—He enjoyed good health till he was eighteen years of age (thirty years ago), when he got wet through, and had to remain at his work in his wet clothes during the day. Three or four days later his right thigh became painful, and he was obliged to give up work. He was laid up for nine months at home, and then went to the London Hospital and was there for nine months. He was treated for rheumatic fever. Whilst at the hospital the right thigh became very much swollen and the bone diseased. A number of incisions were made in different parts of the thigh, partly to relieve tension and partly to remove pieces of dead bone. During the first few months after he left the hospital the wounds on the inner side of the thigh healed, but those made behind the knee-joint did not, and, the intervening tissue gradually breaking down, a large ulcerating surface remained. During the last two or three years this had caused him much pain, and sixteen months ago he was unable to continue his work on that account, and has been laid up since. Three years ago a piece of bone, the size of his little finger, came away by the wound. During the last eighteen months he has been living very badly, having meat only once a week. He has been a hard drinker, but not recently, being unable to afford drink.

The patient is a thin, badly nourished man, with a somewhat anxious expression. At the posterior aspect of the right leg, in the upper half of the popliteal space, is a raw surface, having a tuberculated fungous appearance, of irregular shape, sloughing in the centre and slightly raised at the margins, five inches in length and four inches across at the broadest part, and covered with a thin purulent discharge. On the inner side of the right thigh, two and five

inches respectively above the knee, are two cicatrices. He complains much of pain in the ulcerated part. The glands in both groins are enlarged. He is ruptured on both sides, and has worn for thirty years a double inguinal truss.

On May 9th Mr. Bryant saw the patient, and said that the disease was epithelioma involving the bone (a small piece of which could be seen coming away on the outer side), and that the lower half of the femur was much expanded. The ulcer was dressed with a lotion of chlorate of soda, and a mixture containing quinine ordered to be taken three times a day. On the 13th, as the pain still continued and his sleep was prevented, he was ordered an injection of morphia, and the ulcer to be dressed with an opium lotion. On the 21st the patient was in much the same state as on admission, and Mr. Bryant said that the only curative treatment was the removal of the diseased part, and he intended doing this by amputating the thigh as low down as possible. Anæsthesia having been produced by bichloride of methylene and continued by chloroform, Mr. Bryant amputated the thigh at the junction of the upper and middle third, making an anterior and posterior flap. Hæmorrhage was stopped by torsion of the vessels, though with some difficulty. The flaps were brought together and kept in place by sutures, and a small splint applied to the back of the stump, the part being covered with dry lint and cotton-wool. Upon examining the removed bone, it was found to be affected with osteo-myelitis. The patient passed a good night; wound a little painful. On the 24th the wound was dressed for the first time; only slight suppuration; temperature 98°; pulse 84. On the 27th the sutures were taken out; the wound was looking well, and was dressed with olive oil; had a slight cough. On the 30th the cough was very troublesome; the wound presented a most satisfactory appearance, and there was scarcely any suppuration. On June 10th the wound was nearly filled with healthy granulations, and on the 17th he was allowed to get out of bed. On the 21st the wound had almost healed up; it was dressed with dry lint, and there was no discharge. The patient was doing exceedingly well, and was moved about the ward in a wheel-chair. On July 4th the patient was told he might leave for the country, and return in two months to have an artificial limb.

EPITHELIAL CANCER OF THE TIBIA; AMPUTATION THROUGH THE KNEE-JOINT; DEATH.

(Under the care of Mr. BRYANT.)

J. T——, aged thirty-two, a gardener, was admitted into Guy's Hospital on the 1st of April, 1872. Twenty-one years ago, when he was eleven years of age, he was struck by a cricket-ball below the right knee, which gave him a great deal of pain. This was about June, and he felt the pain till November, when he observed a small swelling where the ball struck him, and the knee became swollen and painful. A blister was applied to the knee, and the abscess which formed below the knee was opened by a surgeon. The wound continued to discharge for two months, when it healed except in one place. In the following spring an incision, eight inches long, was made on the internal aspect of the right tibia; but the dead bone, which had been recognised by probing, was not separable. In May of the following year the patient removed from the wound made by the incision a piece of bone six inches long and one inch broad. There has been some discharge from the wound at intervals, but no pain till a year ago, when the limb gradually grew larger. During the last year thirty or forty small pieces of bone have come away from the wound; the largest was a piece three inches long and one inch broad.

The patient appears in good health, and complains only of the growth below the knee. In front of the upper part of the right tibia is an ulcerated mass, four inches and a half long and five inches broad; its upper edge projects forwards, and the sides are everted; the central part is sloughing and depressed. The lateral parts are composed of fungous growths, projecting an inch from the adjacent parts, and are covered by a purulent discharge. The bone is much expanded, both above and below the growth. The inguinal glands on both sides are enlarged.

Mr. Bryant said that the growth was of carcinomatous origin, most probably epithelioma, which had originated in the cicatrix where the abscess was, and that the name of "osteo-carcinoma" might be given to it. He was ordered a mixture containing quinine three times a day.

On the 19th of April the patient was brought into the operating theatre, and Mr. Bryant remarked that it was impossible to remove the diseased parts alone, and the leg must be amputated; and, as the parts above the knee were healthy, amputation through the knee-joint would be the best operation. A good stump would then be obtained; and there would be less constitutional disturbance than after amputation above the knee. The patient was put under the influence of chloroform, and Mr. Bryant removed the limb, making the anterior and posterior flaps of the same length, as the diseased condition of the parts would not allow of a long anterior flap. The patella was dissected off, and the joint opened from the front. The vessels were secured by torsion; but there was a great deal of hæmorrhage, principally venous, and the popliteal vein was ligatured. The flaps were brought into apposition, and kept together by sutures; after which a short padded splint was put under the limb, and the stump covered with lint and cotton-wool. The patient passed a good night; no sickness; tongue clean; slight diarrhœa; pulse 112.

On the 22nd diarrhœa was troublesome; appetite bad; tongue furred; skin hot and dry; occasional rigors; pulse 140. The dresser removed the sutures. Union had nowhere taken place by first intention. The flaps were beginning to slough. Bread poultices were applied.

On the 23rd the patient appeared much exhausted and had extreme difficulty in breathing; pulse imperceptible at wrist at 11.30 A.M. He died at 2.50 P.M. No post-mortem examination allowed.

ST. THOMAS'S HOSPITAL.

DISEASE OF OS CALCIS; OPERATION; RECOVERY.

(Under the care of Mr. FRANCIS MASON.)

THE patient was a woman aged thirty-six, who was admitted in March last. She was fairly strong, married, and had several healthy children. When five years old she fell violently on the left heel, and from that time has always had more or less discomfort, and occasionally has suffered very severe pain in the part. Three years ago an abscess formed on the outer side of the os calcis, which has continued to discharge more or less ever since. She now complains of the pain being of a gnawing character, and likens it, without the idea being suggested to her, to the pain of toothache. There are three fistulous openings on the outer side of the os calcis, which lead to a cavity containing a quantity of friable bone, the probe readily reaching the opposite side of the cavity. The ankle-joint is in no way implicated, and the astragalus with its articular surfaces appears to be free from disease.

On Wednesday, March 27th, the patient had chloroform, and Mr. Mason made an incision in the direction of the sinuses, and after having freely opened the outer surface of the os calcis with cutting pliers, scooped away the whole of the contents of the cavity, leaving the os calcis almost a mere shell of bone. In using the gouge and cutting pliers great care was taken not to open any other part of the very thin wall of bone. A plain piece of lint was then introduced, and after a few weeks the wound healed perfectly, so that the patient could walk without the slightest discomfort.

In remarking on this case Mr. Mason dwelt on the desirability of making a free opening into the bone so as to allow of the entire removal of the broken-down and carious débris, as well as to permit the ready exit of subsequent discharges. The knife and forceps could be freely used with comparative impunity on the outer side of the foot. In such a case as this amputation of the foot was not to be thought of, and excision of the whole bone was unnecessary, the complete evacuation of the diseased contents being all that was required. The advantages of surgical interference in this instance were immediate and abundantly evident, in that she had not for years had such refreshing sleep as she had on the night after the operation. It was not a little surprising, too, to notice the marked and rapid improvement in her general health as soon as the source of irritation, giving rise to persistent discharge and causing loss of much physical strength, was removed.

SEAMEN'S HOSPITAL, GREENWICH.

COMPOUND FRACTURE OF LEFT FEMUR AND BONES OF LEFT FOREARM; THE INJURED LOWER EXTREMITY EXTENDED BY WEIGHTS; RECOVERY.

(Under the care of Mr. W. JOHNSON SMITH.)

ERNEST P——, aged twenty-five, a muscular German, was admitted with severe injuries to the left arm and thigh, and to the head, caused by a fall from aloft.

Nature of injuries.—Fracture of femur at the junction of upper and middle third. On the outer surface of the limb, and over the seat of fracture, was a small wound communicating with bare bone, and into which the whole of the little finger could be passed. The soft tissues about the fracture much contused. There had been considerable venous hæmorrhage from the wound, but this after the patient's admission was arrested by pressure.—Fracture of both bones of left forearm at the lower third. Over the outer surface of the radius was a small wound, at the bottom of which bare bone could be seen.—A deep wound about four inches in length extending transversely along the lower edge of inferior maxillary bone on right side. The patient was violently delirious.

The injured lower extremity was at once put up in a long outside splint. The fractured arm was placed on a straight wooden splint. The wound across the chin was closed by an uninterrupted silk suture.

During the first week of treatment the patient was delirious and very restless, and great difficulty was experienced in keeping the fractured thigh in a fair position.

On Dec. 2nd the thigh was much swollen and the skin inflamed. The discharge from the wound was of a dark colour and very fetid. Chloroform having been administered, a deep incision was made into the swollen tissues. The long splint was removed and the limb retained between two heavy sand-bags. The inflammatory symptoms then rapidly subsided, but the patient still continued to be restless and delirious, frequently attempting to get out of bed, and passing both fæces and urine over the sheets.

On the 6th, as the patient had become more quiet and more amenable, the left lower extremity was extended by a weight of twelve pounds, which was slung by a cord over a pulley fixed at the foot of the bed. Lateral movement and rotation of the limb were restrained by heavy sand-bags. At this period there was a large wound on the outer surface of the thigh through which there was much protrusion of muscle and sloughing tissue. A large extent of bare bone could be felt at the bottom of the wound, and there was considerable longitudinal displacement of the fragments.

In the injured arm there was considerable exposure of bare bone, but not very much displacement. The patient was much weakened by the profuse purulent discharge from the wounds in the thigh and arm, and on December 17th had a severe attack of hæmoptysis which lasted for two days, and was treated by ice and pills containing acetate of lead and opium.

The injured thigh was kept in a state of extension by means of a weight, at first of twelve and afterwards of fourteen pounds, during the whole of January of the present year. The overriding of the fragments was gradually reduced, and at the end of the month there was no appreciable difference in the length of the two lower limbs. Union took place speedily, but with formation of a large mass of callus, in the centre of which was a considerable quantity of dead bone.

On January 29th a piece of necrosed bone, about two inches in length and comprising about one-half of the thickness of the femur, was removed through the wound by forceps. The wound then rapidly contracted, and the discharge became much reduced in amount.

On February 13th a large piece of dead bone was removed from the lower extremity of the radius. The wound in the arm then closed, and the fracture in this region became united. Firm anchylosis of the wrist-joint resulted, but the patient was able to move the fingers.

On the 20th another piece of necrosed bone, about one inch in length, was removed from the wound in the thigh. The wound then contracted to a small fistulous canal, from which there was a slight weeping of thin clear fluid.

In March the patient was able to move about on crutches. The general health was very good, and convalescence proceeded rapidly and favourably until May 2nd, when the patient had a sharp attack of erysipelas, starting from the small wound in the thigh. In consequence of this he was kept to his bed for two weeks, but afterwards rapidly improved, and was soon about again, and able to walk for a considerable distance with the aid of a stick.

On May 29th the man was discharged. There was firm union of the fractured femur, with no appreciable difference in the length of the two limbs. There was still a fistulous opening on the outer surface of the thigh, into which a small probe could be passed to a depth of about one inch. No bare bone could be felt. The movements at the hip and knee were free, and the man could walk very fairly with the aid of a stick or one crutch.

BALTIMORE (U.S.A.) EYE AND EAR INFIRMARY.

AN ARTIFICIAL EYE WORN TWELVE YEARS WITHOUT EVER HAVING BEEN REMOVED.

(Under the care of Dr. JULIAN J. CHISOLM.)

MARGARET C——, aged thirty-four, presented herself for treatment with the lids of the left eye much inflamed and forcibly distended by an artificial eye, which was showing its edges and was on the point of falling out. The socket had gradually filled up behind it, and had finally extruded it from between the lids. She reported that the eye had been inserted twelve years since. For fear that she would not be able to replace it if removed, she had never taken it out, but had worn it steadily night and day until the present moment, when, fearing that it would drop out, she applied to have the trouble corrected. When the eye was removed, the conjunctiva from the cul de sacs (for a stump of eyeball was still retained) had become hypertrophied, exhibiting large folds of tissue, from which there was a copious muco-purulent secretion. Astringent lotions were applied, and in three weeks these mucous folds had been converted into cicatricial tissue, closing up the canthi to such an extent as to expose a round surface, a little smaller than the area of the cornea, making it impossible to rear an eye in the future.

CANCER OF THE CORNEA NECESSITATING THE REMOVAL OF AN EYE IN WHICH THERE WAS STILL GOOD VISION.

Mrs. B——, aged forty-nine, in otherwise perfect health, visited the infirmary in December, 1871, for a small painful growth located upon the outer edge of the left cornea. The growth consisted of three small dark-brown masses, arranging themselves at the junction of the cornea and sclerotic. The central and largest mass was the size of a split pea, the two small ones about the size of millet-seeds. The growth was accompanied by some conjunctival congestion, which limited itself to the outer canthus. One year since a growth of similar size had been removed by her family physician, and the surface thoroughly cauterised. At the end of six months the growth had returned, necessitating a second operation and cauterisation. She now presented herself the third time for operation. The tumour did not involve more than a quarter of the periphery of the cornea, and had encroached upon the surface to a very limited extent. Vision in this eye was good. The constant friction of the tumours by the lids was the cause of much annoyance. Dr. Chisolm carefully dissected away the growth, and had the satisfaction of finding it heal over rapidly, with an apparently smooth conjunctival surface. The eye remained cured only a few weeks when a recurrence of the tumour commenced to show itself, rendering admission to the infirmary again necessary in April. The dusky corneal growth exhibited a similar condition as when removed in December. As its frequent recurrence indicated malignancy, it was deemed prudent to remove the eyeball for the purpose of isolating the disease, although there was still good sight in it, and not await the complete infiltration of the cornea and the spreading of the disease over a large conjunctival surface. A microscopic examination exhibited all the indications of malignancy, with cancer elements infiltrated throughout the corneal parenchyma upon which the tumour had established itself.

Reviews and Notices of Books.

An Essay on Sea-sickness. Explaining its real Nature, and giving practical advice for its Prevention and Treatment. By COLOMANUS DE ROCHLITZ, M.D., Ch.D., Vienna. London: Longmans.

SEA-SICKNESS—the one terror of the ocean not mentioned by Horace in his apostrophe to the ship which wafted Virgil to Athens—is yet so formidable to the seafarer in a passage even as short as that between Folkestone and Calais, that engineering skill is at present being taxed to its uttermost to invent some other mode of transit than the traditional one. Now it is a proposal to have a saloon swung on a pivot in the ship's centre, so as to preserve its equilibrium amid all the pitching of the vessel; now it is a scheme to run a railway over a succession of steam floats; now it is the yet bolder plan of piercing a tunnel beneath the channel bed. These devices attest the passenger's dread of a malady which, even if obviated between Calais and Dover, will check the alacrity of those who go down to the sea in ships and do business on the great waters, till its pathology is finally made out, and its prevention or cure arrived at.

In the essay before us a highly accomplished Austrian physician makes a distinct advance on our previous knowledge of the nature and treatment of sea-sickness. In the first place, he pronounces the malady to be no sickness at all, it being a state of the body arising from no derangement of certain organic functions. There are, indeed, but two symptoms of sea-sickness which never fail to present themselves, and are truly pathognomonic: first, the feeling of nausea; second, the spasm of certain sphincters. Vomiting is not a characteristic, but all the malaise experienced comes from the contraction of the œsophageal, anal, and vesical sphincters. The first effect of the motion of a ship on the body is to put the muscles of the abdomen in a state of lesser or greater contraction. As these contract the cavity they enclose becomes smaller, and its contents under this pressure will seek for their natural outlets.

Nausea, the chief symptom of sea-sickness, is somewhat more complex in its explanation. It is a specific sensation of the pneumogastric nerve, just as the sensations of appetite and satiation are supposed to be. It is caused chiefly by vertigo, or that disturbed state of our consciousness during which we are unable to form a correct idea as to our body's equilibrium, and are impressed with the notion that we are about to fall. But what produces vertigo? Dr. de Rochlitz is ready with his answer. "Vertigo is always produced through indistinct vision, which itself may be the result of a deficient accommodation, of a sudden anæmic or hyperæmic state of the bulb of the eye, or of that sense of unsteadiness arising from the rolling of the ship." The attempt under the latter predicament to balance the body is, owing to mental agitation, made wrongly and hastily. "Instead," says Dr. de Rochlitz, "of using the muscles of the lower extremities only, which are the sole natural supports of our body's balance, other muscles are brought into action too—first the abdominal muscles, very likely because close to hand, and as they contract nausea is felt on account of the impending vomition." Another source of vomiting is the sensation of a continued, regular displacement of the abdominal intestines and their contents, as will happen during swinging. Peristaltic and anti-peristaltic movement being set up in the bowels, the latter, extending to the stomach, will force up some of the contents into the mouth.

Dr. de Rochlitz illustrates these positions with amplitude and ingenuity, and next proceeds to consider the treatment. There is nature's temporary cure—the abdominal muscles being so exhausted they can no longer contract. To make it complete, says our author, "get up and attempt to walk on the rolling pitching ship while the abdominal muscles are left out of play on account of temporary paralysis and consequent tenderness. Two days' exercise is quite sufficient to teach you the art, what set of muscles to use only for keeping up your body's balance." As to "curing" the attack, Dr. de Rochlitz shakes his head dubiously. To Dr. Chapman's treatment, that of deadening, by a bag of ice applied to the spine, the abdominal nerves at their origin, he would prefer anæsthetising the abdominal muscles with ether spray. Narcotics or anæsthetics he would discard altogether. A series of practical suggestions, derived from a long experience of ocean and channel voyages, occupy the remainder of the essay, which we commend to all who are about to undertake the annual continental trip or the occasional and more distant tour.

Dr. de Rochlitz, we must add, however, would have many more readers were his sentences less involved and his phraseology less German. The accent of a refined foreigner is sometimes not unpleasant; and so is his idiom. But Dr. de Rochlitz reminds us of Sir Walter's "Dousterswivel."

Traité de Chirurgie d'Armée. Par L. LEGOUEST, Inspecteur du Service de Santé de l'Armée, &c. Paris: J. B. Baillière et Fils. 1872.

THIS is a second edition of what may be considered the standard French work on military surgery, the first edition having appeared in the year 1863. It comprises twenty chapters. The first five chapters describe the varieties of arms employed in war, and the different kinds of injury produced by each. This portion of the work is singularly defective in regard of information concerning the mitrailleuse bullets, or the wounds inflicted therewith. There is a short reference to the chassepôt ball, but no comparison drawn between the surgical features of injury by this missile, and that produced by the ball of the Prussian needle-gun. Chapters VI. and VII. treat of gunshot wounds generally. These chapters are very well written, affording full information, as well as excellent surgical directions as to several modes of procedure under varying circumstances. The pages devoted to traumatic hæmorrhage, primary and consecutive, contain full accounts of the nature, causation, and mode of treatment of the various well-recognised forms of this grave complication of gunshot injuries; but we regret to find that no new light is thrown upon the pathology of that form of capillary bleeding described by Stromeyer as parenchymatous or phlebostatic hæmorrhage; indeed, there is only an indirect reference to the French term of bleeding "en nappe." The use of torsion and acupressure in securing bleeding arteries is also dismissed with a few cursory remarks, and these means of arresting hæmorrhage are evidently regarded with disfavour by the author, who says: "Elle (la torsion) n'inspire pas pour l'occlusion des troncs volumineux une sécurité suffisante au chirurgien d'armée. Nous en dirons autant de l'acupressure. L'une et l'autre de ces opérations, plus longues et plus difficiles à exécuter, moins certaines dans leurs résultats que les suivantes, ne peuvent trouver place qu'exceptionnellement dans la pratique de la chirurgie militaire."

The next eight chapters are occupied by the details of battle-field injuries of the several regions of the body and of the extremities. Here the information, although not new, is certainly exhaustive and useful. The arrangement of the material is good, and the instruction afforded is excellent.

Chapter XVI., which deals with amputations and resections, is also valuable. The history of the division of amputations

into primary, intermediate, and secondary, and various synonyms (for these terms are very complete), the indications for adopting resection, and the advantages or peculiarities of this operation in battle-field injury of the several articulations, are fully considered. We are sorry we cannot bestow equal praise upon the paragraphs allotted to osteomyelitis, which is dealt with as a tolerably frequent consequence of these operations. This subject is treated in a very curt and imperfect manner, the account of the affection being much inferior to that given by the American writers on the same subject.

In Chapter XVIII. tetanus, infection purulente, infection putride, and pourriture d'hôpital, are considered under the heading of general accidents of wounds. We perceive that the author has drawn a wider distinction than in the previous edition between pyæmia and septicæmia.

The last chapter disposes very fully of the sanitary arrangement of an army on active service, and on this subject the most recent information is given respecting the detailed arrangements for the carriage of wounded, as well as of transport for field medical equipment, in both the French and German armies during the late war. We observe that the author acknowledges having copied some photographs of surgical injury from the records of the army medical museum of the United States, and some plates of stretchers, ambulance waggons, hospital tents, &c., from the work of Deputy-Inspector Longmore on Ambulances.

SIMPLE METHODS OF WATER ANALYSIS.

IN recent articles we have drawn attention to the chief sources of household water-supply, and to the nature of the organic pollutions which so often render the water of our houses a source of disease. Every medical practitioner is familiar with the terrible risks attendant upon the use of such water, and is anxious to employ the power and influence which he possesses in exposing those risks and in striving to avert them. But he is restrained by practical difficulties which are, in too many cases, insuperable. Local authorities are inert and often ignorant. The stupidity of the tenant is only equalled by the cupidity of the landlord. Water analysis costs money; and anyone who suggests its necessity is sure to be met instantly with the question, Who is to pay for it? Unfortunately, a proper analysis of water for sewage or drainage contamination is a process which from its complexity can only be carried out by a professional chemist; and in every important case such an analysis is a matter of necessity. But it is nevertheless true that it is perfectly possible to form a useful and, in many cases, a sufficient estimate of the quality of a water, and even approximately of the extent of its contamination, by the use of well-known methods so simple as to be available to every intelligent man, and certainly to every medical practitioner. The methods we are about to describe must, of course, be applied as accurately as possible, and the results interpreted with caution; but we have verified them all with care, and know that they may be depended on to the extent we indicate. For the sake of convenience, we have arranged them all for use with the weights and measures found in every surgery and chemist's shop.

1. *Examination of the source.*—This is of vital importance, and will often supersede the necessity of any analysis by indicating that the water *must* be foul. The chief sources are three—namely, rivers, surface-wells or springs, and deep wells or deep-seated springs. Wells 100 ft. in depth may be reckoned in the last class. The contamination of rivers may be judged of by circumstances which will occur to all: the nature of the house- and land-drainage they receive, the proximity of factories, &c. Few rivers are above suspicion, and many are utterly abominable as sources of supply. It is somewhat more difficult in many cases to judge of the contamination which a shallow well, often not more than 15 ft. deep, receives. Regard must of course be had to the proximity of drains, cesspools, stables, and the like; and much may often be gathered from a study of the nature and conformation of the land. Loose porous soil—such as gravel or broken chalk—is not only more liable to drainage contamination, but affords a more imperfect filtration than closer soil. Very shallow porous soils are often exceedingly foul from the stagnation and accumulation in them of manurial matters. The dip of the land is also an important element in the study. A cesspool below a well on a hill-side may not pollute the water; but if above, the water will be almost sure to suffer. A short time ago we analysed the water of two wells, one at the bottom, and one near the top, of the same hill. The former showed almost exactly three times the amount of contamination of the latter!

The quality of the water of deep wells is still more difficult to determine by mere observation. If no surface-drainage can find its way in—a condition not always secured,—we have to consider the filtering efficiency of the bed of earth through which the water has to pass in its downward passage. The "previous sewage contamination"—the record of past fouling—in such waters is often high, but it by no means follows that the water may not be free, or nearly free, from unoxidised organic matter. The best water supplied to London is probably that of the Kent Company, which is drawn from chalk wells of great depth. Though hard, it is well aerated, and almost entirely free from deleterious matters; and yet its nitrogen indicates a previous contamination greater than that of any other London water.

2. *General characters.*—The amount of suspended matter in the water should be observed carefully. When it has subsided, a portion may be examined under the microscope. Low forms of animal and vegetable life will often be seen, and this indication has some value, though not very much. In very bad water fragments of undigested muscular fibre can sometimes be seen. If a portion of the sediment be dried and burnt in a small porcelain basin over a spirit-lamp, it will exhale an unpleasant smell, if of animal nature. The *colour* of the water is best seen by looking down a tall jar or glass tube. It should be greenish-blue; but clay, peat, and other harmless contaminations, cause a yellow or brownish tint; and, on the other hand, bad water has sometimes a tolerably good colour. The *smell* is often sufficient to identify very bad water. Shake a sample in a bottle and warm it occasionally: a fæcal or putrescent smell will often become apparent under these circumstances, though sometimes not until the bottle has stood for a day or two. It is a good plan to evaporate a portion of the water to dryness in a basin, and then heat it over a spirit-lamp. Any organic matter will blacken under these circumstances, but animal matters, if in any quantity, will also give a bad smell.

3. *Nitrogen present as nitrates and nitrites.*—This is an extremely important determination, because it affords a measure of the minimum "previous sewage, or other animal contamination," to use Dr. Frankland's phrase, which the water has undergone. In other words, it enables us to calculate how many parts in 100,000 of average London sewage would be required to yield the amount of nitrogen which our analysis shows. Every 10,000 parts of London sewage contain on the average one part of nitrogen, so that if a water contains one part of nitrogen in 100,000, it contains as much as if it had been contaminated with

10,000 parts of London sewage in every 100,000 parts. This is the true meaning of this contested phrase. It simply states the *London sewage equivalent* of the nitrogen of the water. It will be seen that to find the previous sewage contamination of a water, we multiply by 10,000 the weight of nitrogen present in 100,000 parts of the water.

Unfortunately, we cannot give any easy and exact process for the determination of this nitrogen. But a useful though somewhat rough indication may be obtained as follows:—Concentrate a portion of the water (say two fluid ounces) to one-eighth of its bulk, avoiding boiling. Let it cool, and pour into a test-tube of about one-third of an inch diameter as much as fills nearly an inch of it. Add an equal bulk of *pure* concentrated sulphuric acid. When the mixture is quite cold hold the tube almost horizontally, and pour in gently about an equal bulk of a pretty strong solution of green vitriol. The iron solution will float on the acid mixture. Let the tube stand for half an hour, and look at the line of junction of the two liquids. If a dark line is visible the water *does not contain less* than ·5 part of nitrogen in 100,000, though of course it may contain more. This is equal to a previous sewage contamination of 5000 in 100,000.

Now for the use to be made of this determination. If the water is from a deep and apparently unobjectionable well, and if the general characters are good, the water need not be condemned, for chalk waters often contain more nitrogen. If the water is from a river or surface-well of tolerably good character, the indication is sufficient to throw a very grave suspicion on it. And lastly, if the history of the water is bad, if it is known or strongly suspected to be contaminated, the indication stamps it at once as certainly dangerous.

By varying the concentration of the water it is possible to arrive at a pretty fair idea of the quantity of nitrogen in the water. Some water reacts without any concentration.

4. *Chlorine.*—We have on a previous occasion pointed out the value of this indication. By an examination of the best water a neighbourhood affords, it is easy to find the amount of chlorine which is natural to the water. In the south of England it seldom amounts to more than 1 part in 100,000, except where sea-water penetrates. Purely local causes may of course produce an excess, but not very often. The determination may be made with sufficient exactness in the following manner:—Dissolve 88·3 grains of pure nitrate of silver in 1 pint of distilled water, and dissolve separately 4 grains of yellow chromate of potash in ½-pint of water. Take 4 ounces of the water to be examined in a tumbler or beaker; add 10 minims of the chromate solution, and then add the silver solution a drop at a time from a minim glass. As soon as the faintest tinge of red appears, read off the number of minims of silver solution which have been added. Every minim indicates 0·1 part of chlorine in 100,000 of the water, so that uncontaminated water ought not to require more than 10 minims to give the red tint in 4 ounces.

5. *Permanganate test.*—The great objection to the last two methods is, they only tell of a previous contamination which may possibly have ceased to be noxious. Of the methods which tell of the present condition of the water, the only one which can be easily applied is the permanganate test, which, unfortunately, is the least trustworthy of them. It depends on the fact that many kinds of organic matters, and particularly putrescent organic matters, are oxidised by permanganate of potash in presence of sulphuric acid. The permanganate, losing its oxygen, loses its beautiful violet colour, and the amount of permanganate decolourised by a given volume of water is therefore some kind of measure of the amount of organic matter in the water. Unfortunately, however, different kinds of organic matter affect the permanganate very differently. Some, urea for instance, do not affect it at all, and, on the other hand, some mineral matters, such as nitrites, sulphites, and protosalts of iron, decolourise it easily. Nevertheless, water which decolourises much permanganate is generally bad water, and we therefore give the test for what it is worth. Dissolve 3·3 grains of pure permanganate of potash in one pint of distilled water. Take one pint of the water to be examined; introduce it into a colourless flask, add 5 fluid drachms of dilute sulphuric acid (1 part strong acid + 5 parts water, by measure) and add the permanganate from a minim glass a little at a time, as in the chlorine process. After every addition shake the flask and let it stand ten minutes. If the violet colour disappears, add a little more, and so on, until the violet colour (not a brown) remains permanent for ten minutes. If the quantity required is large it is better to dilute another portion of the water with distilled water and begin again. Each minim of permanganate used in this process represents ·001 part of oxygen given up to 100,000 parts of water. To give an idea of the working of the test we may quote the results of its application to the London waters in 1865. For the quantities of material given above, the permanganate used may be said to have varied from 5 to 200 minims. Accordingly the quantity of oxygen required to oxidise the organic matter in 100,000 parts of water was taken as varying from 0·005 to 0·2 part.

That these methods are rough we freely admit, but we believe they may be safely used, with due care, in those cases in which a proper scientific analysis cannot be obtained.

NOTES ON PROVINCIAL HOSPITALS.

THE "BECKETT" HOSPITAL, BARNSLEY.

THE Beckett Dispensary was established in 1865, but a want of in-patient accommodation having been experienced, the dispensary has been recently rebuilt and greatly enlarged so as to form a compact, well-arranged hospital for twenty beds.

It is a two-storied brick building, with stone facings, and is situated on an elevated site at the outskirts of the town. It has several features which are uncommon in the smaller provincial hospitals.

The patients are received in a dressing-room on the left of the principal entrance, opening into which is a lift on which they are raised to the upper floor, and received into the operating theatre direct, without being first taken into a ward. Only male patients are admitted, and most of these are accidents.

The wards are of fair size and contain four or six beds; the floors are dry rubbed, and the ventilation is good. At the right end of the building is a square tower, in which are the bath-rooms, lavatories, and closets, separated from the wards by a small passage, on either side of which are windows extending to the ceiling, so that a through current of air is maintained, and no effluvia enter the wards. The bedsteads are made by Allen of Bristol, and are light and convenient. Each has a semicircular iron rod coming from the centre of the back of the bed, and overhanging the patient, and by means of a wooden bar attached to this rod by a chain he can raise himself up in the bed without difficulty. These bedsteads have wooden boards, about 5 in. in width, running from the head to the foot of the bed, and on these the horse-hair mattresses rest. These boards are easily kept clean; they do not soil or destroy the mattress like iron bars do, and are said by the patients to be very comfortable to lie upon. The kitchens have in connexion with them a drying stove and a disinfecting apparatus, the use of which is not very evident as no fevers or infectious diseases are admitted.

The hospital, though supplying an acknowledged want in

the district, does not seem to be sufficiently appreciated by those whom it was intended to benefit. At the time of our visit some of the wards were empty, and only eight of the beds were occupied. In a large and increasing mining and manufacturing district, where fractures and other accidents are numerous, it is remarkable that only forty-one patients should have been admitted in twelve months. It is suggested as a reason that most of the practitioners in the neighbourhood have contracts with the pit-owners for attending to those injured in the mines, and therefore only rarely recommend their patients to seek admission to the hospital. The result of the treatment of those admitted seems to have been most successful, no deaths having occurred, although many of the accidents were of a very severe nature, including three fractured thighs and sixteen fractures of the leg, several of which were compound and comminuted. Two lithotomies were performed successfully, and also several amputations and other major operations, during the past year. Upwards of two thousand out-patients were attended to during the same period.

EMIGRATION.

THE Thirty-second General Report of the Emigration Commissioners has just appeared, and shows that during the past year a total of 252,435 persons emigrated from the shores of the United Kingdom. Of these, 166,166 embarked at Liverpool, 14,618 in London, 3603 at Plymouth, and 3886 at other English ports, 22,901 at Glasgow, 23,039 at Greenock, 30,660 at Cork, 9607 at Londonderry, and 856 at other ports in Scotland and Ireland. As heretofore, by far the largest proportion went to the United States, and of these 223,111 went in steamships, and 8403 in sailing vessels; the deaths on board the former, taking the voyages at an average of twelve days, being equal to a mortality of 15·11 per 1000 per annum. The excess of females over males in the population of the United Kingdom is of course due in some degree to emigration, inasmuch as it appears that of 2,128,235 persons who have emigrated from our shores during the past ten years, 1,279,240 were males, and 848,995 females.

The Commissioners emphasize particularly the advantages possessed by coolie immigrants who emigrate to the West Indies, and it appears that the law in all these colonies compels the employer, among other duties, to maintain his coolies in hospital when sick, and furnish them gratuitously with medical attendance, nurses, and medicines. The Government of British Guiana are about to place medical attendants to the coolies in a proper and definite position by dividing the colony into twenty-eight medical districts, to each of which a Government practitioner will be appointed. An Act was passed last year by the Legislature of the island of St. Vincent, "to provide medical attendance for the labouring classes and immigrants." It authorises the local government to appoint and pay a medical staff, to divide the island into five districts, in each of which a medical officer shall be stationed, whose duties will comprise attendance on immigrants, prisoners, and police, and vaccination. As, however, the salaries of these officers are not, according to present arrangements, to exceed in the aggregate £1200 a year, no particular inducement is held out to doctors about to emigrate.

That part of the Report which refers particularly to Canada recites that of 31,438 emigrants who sailed from this country, 25 66 were conveyed in steamships, and the rest in sailing vessels; that the number of deaths in the former was at the rate of 6·90, and in the latter at the rate of 17·57 per annum; the average length of the voyage being fourteen days for the steamers and thirty-two days for the sailing ships. It appears also that all emigrants who arrived in the St. Lawrence from foreign ports were conveyed in sailing vessels; and that the mortality was 40·72 per 1000 per annum, taking the average of the voyages at forty-eight days.

These comparative statistics speak for themselves in showing that our emigration officers conduct their work well and carefully. It needs no little assiduity and attention to send off living cargoes in good sanitary condition and to keep them so during the voyage, though on the latter score we owe much to the liberality of the shipowners, and particularly those at the port of Liverpool. It is very satisfactory to know that an Act was passed by the Governor-General of India in Council, in the spring of last year, having for its object the consolidation of laws relating to the emigration of native labourers, &c.; as we may anticipate putting an end to the fearful mortality on board coolie ships on which we have commented so frequently and so emphatically.

ST. ANDREWS MEDICAL GRADUATES' ASSOCIATION.

THE sixth anniversary session of this Association was held at Willis's Rooms on Saturday, July 6.

From the report of the Council it appears that the Association numbers 463 members, 25 associates, and 45 honorary members.

The President, Deputy Inspector-General Gordon, C.B., delivered a highly interesting address, "The Army Surgeon, his Work and Works." After thanking the Association for the compliment paid to the army medical officers through him, he described in graphic detail the duties of an army surgeon in peace and in war. He proceeded:—"With regard to hygienic measures, the experience of the Franco-German war indicated three very remarkable circumstances. Within besieged Paris, for example, great as the mortality continued to be throughout the winter of 1870-71, and rife as were the causes of disease in operation—including a condition of semi-starvation, insufficient fuel, physical and moral depression, together with the prevalence of epidemic diseases among the populace—such was the energy shown by the health authorities, and the discretion of the measures dictated by them, that the death-rates were maintained at a mere fraction of what they had been, not only on the occasion of the previous siege of the same capital in the year 1590, but also of those of other sieges in more recent times. So it was with other French cities, as Metz and Strasburg. So also it was among the besiegers of those places. On former occasions, history tells us that the forces investing a city suffered by disease to an extent only in a degree less than those invested; and, with regard to Metz, that a former besieging army—that of Charles V., in 1552—had actually to withdraw in consequence of the frightful ravages of disease in its ranks. But all this has now been changed. The observance of hygienic principles has enabled commanders to maintain a besieging army in a state of physical efficiency equal to that enjoyed by troops in ordinary quarters. But, and in the second place, it has been demonstrated that circumstances may arise in which the existence of one radical defect may neutralise all the best directed efforts of hygiene, so long as that cardinal defect is unremoved. Thus, all the measures that it has been possible to take have failed to neutralise or compensate for the evils arising from the adoption—as hospitals for wounded—of buildings unsuitably constructed; of those occupying defective positions; and of those, let me add, that have been impregnated with human emanations, such as churches, ball-rooms, theatres, and so on. In none of these were hygienic measures capable of preventing the occurrence of hospital diseases. In the third place, there have occurred during the late war, as in previous campaigns, and as there must be in all, occasions on which the pressure or necessities of military operations for the time being supersede all questions of hygiene. A military end has to be attained, a rapid movement effected; the sacrifice of a certain number is inevitable; it is taken into account, and while the movement is being effected there is neither time nor room for hygiene.

The anniversary dinner was held in the evening, the President in the chair. Admiral Sir E. Belcher, K.C.B., Sir A. Armstrong, K.C.B., Dr. Lyon Playfair, M.P., Dr. Halley, Treasurer of the Edinburgh Club, were among those present. A genial chairman and a good dinner combined to secure a very pleasant evening.

THE LANCET.

LONDON: SATURDAY, JULY 13, 1872.

WE print elsewhere a letter from Mr. KEMP, the secretary to the Royal Hospital for Diseases of the Chest, called forth by our recent suggestion with regard to future elections at the Manchester Infirmary. Mr. KEMP sends also the circular to which he refers. It contains the laws of the hospital relating to the election, the names, qualifications, offices, and addresses of six candidates who had been passed as eligible by the Council, and a form of proxy authorising the treasurer, or, failing him, one of three other governors, to vote for any one of these candidates whom the governor signing the form might select. It is so nearly like our suggestion that we are very glad to receive Mr. KEMP'S testimony to the satisfactory way in which it was found to work; but it still lacks elements on which we are disposed to lay stress. It does not contain either the letters of application of the candidates or their testimonials; and therefore it cannot supersede the necessity for their addressing themselves directly to the governors. It seems just, if a man has any reason to urge why he should be selected for a particular office, that he should be permitted to lay this reason before those with whom the selection will rest; and therefore, unless the letters and testimonials of candidates are sent out for them by the committee of the institution, the candidates cannot possibly be restrained from circularising the governors themselves—that is, from canvassing. We would, as we said recently, have the committee send to each governor a report containing a voting paper, and the name, qualifications, offices, application, and testimonials of each candidate, together with a short commentary thereon. Whatever the printing and postage of this report might cost should be divided by the number of candidates, and each should pay his share of the amount; and should be prohibited, on pain of disqualification, from urging his claims in any other manner. The effect would be that candidates would be relieved from great expense, trouble, and humiliation, and would yet have perfectly fair play; while governors would have all applications brought before them at the same time, and would not be worried by canvassers, nor surprised into premature promises to support inferior men, nor pained by having to refuse the pressing solicitations of personal friends. The arrangement would be a clear gain to everybody, save and except to candidates of a class who at present are too often successful, and whose success depends upon a lavish expenditure of money, or upon attachment to some sect or party, or upon family connexion with influential or pushing people. To all these the method we propose would be as appalling as a genuine Ballot Bill would be to employers who control the votes of their workpeople.

At no distant time, moreover, such a change in the conduct of hospital elections would bring about a corresponding reform in the matter of testimonials. For the present, testimonials must be endured; and so we have made provision for printing them a part of our programme. But the commentary of the committee upon them should be perfectly candid, especially as touching that exuberance of language in which testimonial-writers delight. As an apt illustration of this part of the subject, we have lately had the pleasure of printing a clergyman's averment that the loss of a particular surgeon to his hospital would be "irreparable." Now a committee commenting on testimonials might very well point out that, in the present state of professional education and acquirements, there is perhaps no surgeon in the whole world whose loss would really be irreparable—no one whose place could not be speedily filled by a successor in all respects his equal. This being so, it would be an obvious corollary that a composition in which words were employed with no particular reference to their meaning would be of far less value than one in which meaning had been carefully weighed and considered. The authors of testimonials would no longer rack their brains for smooth phrases and laudatory epithets; but would ask themselves what they really knew about the candidate, and what they could truly and honestly say in his support.

We have referred already to the humiliation involved in the present system; and really this is the consideration that touches us most nearly. We have often been pained by the reflection that a contest for a hospital appointment must degrade the whole profession in the eyes of hospital governors. Custom reconciles us to a great deal. But, if it were now proposed for the first time that an intending candidate should commence his operations by applying to all his friends for letters certifying him to be wise, and strong, and clever, and beautiful, and six feet high; that he should next print these letters and distribute them over all the country side; and that his rivals should all do likewise,—we are well assured that many of the higher minds in our calling would be stricken with horror and dismay. And the melancholy truth is that numbers of men who have no claim to hospital office, and no chance of getting it, do actually become candidates in order to avail themselves of the "legitimate" opportunities for advertising that a vacancy is held to afford. They send forth testimonials that are just as laudatory as those of the men whose known merits give them real places in the contest, and obtain a sort of glory in which a hairdresser might possibly delight, and from which he might derive customers and extract profit. But the arts of trade sully the robe of science, and pluck the crown from her brow.

It is a curious illustration of the effects of premature canvassing that the circular upon which we lately commented was speedily followed by a second, proceeding directly from another intending candidate. This gentleman did not ask for votes or proxies; but simply intimated that there was no actual vacancy, and that he intends to come forward in case one should be declared. He therefore asked the trustees to refrain from binding themselves by promises.

The Times, in a very good notice of the able and interesting First Annual Report of the Committee of Management

of the Stockwell Fever and Small-pox Hospitals, speaks of the "late" epidemic of small-pox. We are sorry to say that we must continue to speak of the epidemic as still present. In London alone, last week, the return of the Registrar-General reported no less than forty-three deaths as registered the week before. This represents a still large number of cases. Our readers know how melancholy are the accounts which we have to give of its ravages in the provinces; and there can be little doubt that nobody will be safe for months to come from an attack of small-pox who has not taken the precaution of getting revaccinated. When the small-pox epidemic began to set in and spread with great rapidity, a most extensive panic was caused, which took the sensible form of a demand for revaccination. Doubtless the great majority of intelligent people with any regard for their health were then revaccinated. But gradually the poorer classes became familiarised with the notion of having small-pox, and also with the idea that there was something injurious and unnatural in the simple operation of vaccination. Hence the epidemic goes on, fluctuating from week to week, but yet steadily killing some, blinding others, and more or less marking all whom it attacks.

But the fact that the small-pox epidemic cannot be regarded as otherwise than present, and in some parts of the country progressive, only adds to the interest of the Report of the Stockwell Fever and Small-pox Hospitals. At the outset, we may say that great credit seems to be due to the Committee of Management for the way in which they almost suddenly, in the beginning of 1871, increased the accommodation supplied by the hospital for small-pox cases. On the 31st of January, 1871, the Small-pox Hospital was opened, with its original number of beds—102; but so rapidly were patients sent in that in three days 130 beds were required, and beds had to be placed in the day-rooms. On the 6th of March the Fever Hospital was opened as a small-pox hospital, and the number of its beds increased from 176 to 224. This hospital, too, soon filled, and 30 additional beds had to be placed in the day-rooms. In April the disease spread more and more rapidly. Some relief was afforded by an arrangement by which convalescent patients were drafted off to the Islington Convalescent Hospital (the old Islington Workhouse) and to a Convalescent Home at Clapton. But the cry was still for more beds, when, by placing beds for convalescents in the corridors and landings, and, with the valuable co-operation of General Sir HENRY STORKS and Colonel STEPHENSON, C.B., raising in three days ten hospital marquees for 120 patients, at a total cost of £400, or £3 10s. a bed, the Committee were able to meet the demand in May for 600 beds. After this date the disease began to abate, and continued to do so until towards the end of December, when a portion of the Fever Hospital had again to be used in the treatment of small-pox cases. The Report is full of information of great practical interest as to the other difficulties which the Committee had to encounter, which were for the most part successfully overcome. The daily cost of patients per head for maintenance and clothing during the half-year ending Lady-day, 1871, was 2s. 2¼d., and for the maintenance and salaries of officers during the same period 2s. 1d.; but for the half-year ending Michaelmas these charges had been reduced respectively to 1s. 2¼d. and 10d. per head. This discrepancy is explained chiefly by a reference to heavy items for fuel, gas, and water, required to clean and dry the new hospitals, in the first half-year, which did not subsequently recur. At first, as may well be imagined, great difficulty was experienced in getting respectable nurses; but as it became known that revaccination afforded almost complete protection, very suitable women presented themselves; and now the Committee boast of a staff of nurses which will bear favourable comparison with that of any hospital in the kingdom. It is gratifying to remark that the patients, with very rare exceptions, on leaving the hospital, gave the most satisfactory account of their treatment in it. The managers pay an obviously just compliment to the way in which Dr. M'CANN, the medical superintendent, and his assistants, and all the other officers, did their duty. Dr. BARBOUR, who was medical superintendent of the Fever Hospital, had unfortunately to resign on the score of ill-health, in September, on the closing of this hospital for small-pox cases. This was to be regretted, not only because it put the managers to inconvenience, but on the ground that Dr. BARBOUR was well fitted for the duties. Our readers will remember his careful and important observation, that some cases of small-pox occurring after revaccination were cases in which the patients had been revaccinated with secondary lymph.

The Medical Report of Dr. M'CANN is a valuable document worthy of careful attention. It embraces much information on the following points:—The construction of the hospital; mode of ventilating the wards; heating of the wards and corridors; mode of conveying patients; mode of disinfecting clothes; nursing; suggestions for stamping out small-pox; forms of the disease; treatment; post-mortem appearances in the different cases; vaccination and the prejudices against it; the principal localities of small-pox and its mode of spreading. We can only skim this report. The mere mention of the points of it will show that Dr. M'CANN has taken a broad human view of this terrible epidemic, as well as close clinical and pathological observations of cases. In regard to the conveyance of cases, he insists on the importance of the convalescents being conveyed home, after disinfection of all their clothes, in separate carriages. Moreover, he seems to detain patients longer than is done in some hospitals before sending them home. Patients are retained till desquamation is complete, the excretions and secretions healthy, and the pulse and temperature normal. In modified small-pox these conditions obtain in about twenty-one days; in severe confluent cases not till eight or ten weeks at least. It is monotonous to repeat the universal testimony concerning vaccination and revaccination. Dr. M'CANN is satisfied that many alleged to be vaccinated are not vaccinated at all, or not vaccinated in the satisfactory and scientific sense of the word; and this may well be, as medical men, even physicians of authority, may still be found who humour mothers by vaccinating only in one place. Not a single case presented itself for admission where undoubted successful revaccination had been performed. Naturally, Dr. M'CANN is therefore in favour of compulsory revaccination from house

to house. No doubt, supposing this to be practicable, it would stamp out small-pox in the country in two or three weeks. But the belief in its practicability says more for Dr. M'CANN's knowledge of vaccination than for his knowledge of human nature, which, in some of its states, uneducated and metaphysical, shows a preference for small-pox, including the sequelæ of boils and blindness, otitis, pneumonias, &c. Two nurses, it should be said, took the disease. One had had a previous attack. The other was revaccinated on arrival at the hospital; but, Dr. M'CANN adds, no doubt the poison was in the system before revaccination could take its proper effect. She never kept her bed a day. These were the only cases in 93 persons officially engaged in the institution; 3976 patients passed through the hospitals in the year. The mortality was 11·8 in the vaccinated, 60·5 in the unvaccinated.

The chief post-mortem appearances noted were variolous eruption in the intestines in severe confluent cases—in the lower part of the small intestine, and in the large intestine. In suppressed small-pox the appearances are not well defined. In hæmorrhagic forms the mesentery is stained often universally of a brownish-red tinge, like the frequent appearance of the internal lining of the aorta. In women there may be loose coagula in the pelvis, probably implying hæmorrhage from the Fallopian tube, and small ecchymotic spots in the vagina. As regards treatment, we have only room left to note Dr. M'CANN's approval, in violent cases of delirium, of restraint by folded sheets as safer and more humane than by attendants.

Two letters on Medical Ethics, one in last week's LANCET, the other in this week's, raise the important question of the right way of dealing with the quarrels which unhappily arise between medical men. One correspondent suggests that they should not be made public; that the publication of the unprofessional behaviour of A to B is a matter of no public interest, and has no deterrent effect on others; in other words, that "dirty linen should be washed at home." He is answered to-day by "A Young L.R.C.P.L.," and not ineffectively, who says that it is not the washing of the dirty linen that is degrading to the profession, but the fact that there is dirty linen to wash. The letters are good statements of the arguments for either ignoring all these professional disputes or trying to resolve them and decide justly between brethren. We should willingly be relieved of the painful duty of deciding between those who should have no differences; but it would be utopian to expect such a millennium yet. As "L.R.C.P.L." says, it is often impossible to settle differences without the intervention of some impartial arbitrator. Agreeing in many points with "L.R.C.P.L.," we think he errs in his estimate of the uses of publishing quarrels. "The only remedy those who have been badly treated by their medical neighbours have is to appeal to their other brethren, that those who have acted wrongly may be shunned." It is binding on every man who thinks himself aggrieved first to consider, coolly and very deliberately, whether he is really so or not. Some men are hypersensitive, and ready to take offence where none was intended, and even where none has been given; they are suspicious and jealous by nature and in the very manner of their spirits. If such people moved among angels, they would fancy their corns trodden on and their ground invaded. The only thing such people can do is to find out and admit to themselves their hyperæsthesia, and, if they must suspect somebody to be in the wrong, to suspect themselves. A medical man ought to be very slow to admit that his brother has acted wrongly to him. A little reflection and reasonableness would often suggest an explanation of conduct that at first seems offensive or selfish. But let us suppose that a man is really injured, that a neighbour has acted selfishly or rudely, and perhaps repeatedly so, what then is to be done? His duty is certainly not yet to publish to the world his personal quarrel. Quarrels are very discreditable, and ought not to be unnecessarily proclaimed. Moreover, when a man is clearly in the right he can afford to exhaust all quiet modes of remonstrance and redress. He is clearly bound to "go and tell his brother his fault" privately. This is in accordance with both Scriptural and professional ethics. If this fails, and he is obliged ultimately to refer to THE LANCET or some other public arbitrator, even then his object must be, not that the offender may be "shunned," but that he may be effectually rebuked and convinced that he is in error. This object is more likely to be gained, in many cases, by private means than by public ones. But undoubtedly there are men, even in the medical profession, who can only be influenced by public censure, and this is a perfectly legitimate *dernier ressort*. We see no reason why, in a perfect system of examination, a student should not be tested in regard to his knowledge of those principles which are to guide his professional conduct. At the same time, the virtues of magnanimity and unselfishness, and a faculty of generously judging others, which alone will avert unseemly quarrels, will not come without much personal effort on the part of us all not only not to give but not to take offence.

EVERYONE is interested in preventing the spread of infectious diseases, and especially of a disease so infectious and dangerous as scarlatina. The poison of scarlatina is endowed with such subtle and tenacious properties that it may be conveyed through many and unsuspected channels. Everybody knows how long it lurks about rooms and clothes. To say nothing of the more obvious sources of infection, playthings, hidden out of sight long ago by the unfortunate parents at the time they lost a child from this disease, may become vehicles of infection to other children; and facts are not wanting to show that scarlatina may be conveyed by a letter through the post. It is anything but pleasant to contemplate the risks to which our children are exposed, in going to the seaside, of contracting diseases that they would have avoided by staying at home; and we are too much, perhaps, accustomed to regard the proprietors of lodging-houses as only intent on "doing well during the season." There is, however, a source of danger to which the family of an unfortunate lodging-house keeper is exposed on all sides from the ignorance, thoughtlessness, or selfishness of strangers. The public journals have lately contained a distressing illustration of the evils that may arise from ignorance or an intentional concealment of the

truth. The facts of the case are simple enough. In August last year, a lady hired some rooms at Eastbourne, and in due course she assumed possession of them, accompanied by a governess, nurse, and five children. A little boy was put to bed on arrival with what was said to be "a cold." Some suspicions seem to have been aroused as to the nature of the child's illness; and these suspicions soon gave place to something very different, when a second child became attacked with what was indubitably scarlatina. The disease extended to the lodging-house keeper's family, and two of her children died of it. The lady who had taken the rooms likewise lost two children by the same malady.

The whole point of the case, from a legal as well as a moral aspect, turned on whether the parents, who sought change of air for an invalid member of the family, were aware of the nature of the disease under which he was labouring, and, knowing it, concealed the fact. How was it that the medical attendant on the family was not called in evidence? He must surely have been able to speak with certainty as to what had been the nature of the disease, if any, affecting the defendant's family. On this subject, however, we are not called upon to pass any opinion. The jury returned a verdict, with £120 damages, for the plaintiff. This amount was certainly not by any means excessive if we consider all that it was meant to cover. We may, of course, easily believe that the defendant had no conception of all the evil consequences that would follow. What concerns us, however, and what concerns the public, is this: How ought we to proceed with the view of guarding against terrible evils of this kind, which are as often the result of want of judgment or knowledge as of want of truthfulness and candour? There is only one way, and that is by insisting that all cases of contagious disease shall be reported to some local medical authority charged with the responsibility of seeing that the public health is not endangered by the dissemination of infection. It might, perhaps, be difficult to find persons ready to receive, and prepared with the necessary arrangements for lodging, convalescents from such diseases without jeopardising the lives of others. Still, to be forewarned is to be forearmed, and proper precautions can only be taken where there exists information as to the facts. Seeing that convalescents from infectious fevers so commonly go to the seaside, it is to us a matter of surprise that the accommodation for them should be so limited at such places.

THE action against the Great Western Railway Company tried in the Court of Exchequer on July 3rd opens up several important questions with regard to the medical profession. It is most unedifying to the public to have four medical men flatly contradicting four of equal eminence on the other side, but it is, we fear, hopeless to prevent this so long as both sides are allowed by law to retain what "experts" they choose. It is unhappily, too, becoming pretty notorious that this physician or surgeon is a good "plaintiff's witness," while that one is a capital "company's witness"; so much so, that one hears lawyers talking of "retaining" A or B, much in the same way that they would speak of securing the services of a successful advocate. Whether gentlemen who notoriously "pile up the agony" when appearing for a plaintiff, or systematically ignore all symptoms whatever when retained for the defence, act in strict accordance with the code of ethics and morals prevalent among professional gentlemen we must leave them to decide.

The point we especially wish to call attention to is the statement reported in the leading daily journal that one of the medical witnesses for the defence thought the condition of the plaintiff had been a little aggravated by the treatment he had undergone. Although the opinion reflects in one sense on the profession, we really think the honesty of it is to be applauded. If four witnesses do not hesitate to swear that their four brethren are mistaken in their diagnosis and prognosis, why should they hesitate to disagree with the treatment adopted? Unfortunately for both plaintiff and defendants, the opinion was too late to be of much service to either, but it is possible, we do not say probable, that had an independent umpire of treatment been appointed earlier, there would not have been such a painful display of opposing scientific evidence at the trial.

The custom at present prevailing is, we believe, for the railway company's medical officer to visit an injured passenger, but to take no part whatever in his treatment, the sufferer's friends calling in whom they choose. The eminent men who are called in to support the case on either side when a trial becomes inevitable have not seen the early stages of the disorder, nor had to do with its treatment, and (without the slightest reference to the present case) it cannot be denied that the treatment would often have been considerably modified had they been consulted. It is for the interest of all parties that a claimant for damages should get well as soon as may be, and it is only fair that the company, which very probably does not dispute its actual liability, should have the power of nominating, at its own cost, a consultant, with a view solely to the recovery of the patient, and without reference to any subsequent action. If the law requires alteration in order to admit of this, there would, we fancy, be no difficulty in carrying out the change, and the medical profession, as a body, would thus be greatly benefited by the saving of scandal now incurred.

Medical Annotations.

"Ne quid nimis."

ARMY MEDICAL MATTERS.

WE strongly suspect that "the wish is father to the thought" in the announcement that recently appeared in a military contemporary to the effect that the Indian Government have under their consideration an important scheme for a radical change in the medical administration in India. Like the scheme for the reorganisation of the British medical service, it has been talked of a good deal without ever having advanced beyond the talking stage. Supposing, however, that the changes sketched by our contemporary be at all near the mark, they are in principle very analogous to those we long ago put forward in the columns of THE LANCET. Shortly, it is proposed to substitute a single military medical staff and a single civil medical staff with undivided responsibilities, for the double military medical

staff, with its hierarchy of inspector- and deputy inspector-generals, statistical officers, sanitary commissioners, and the rest, at present in existence. We cannot, however, conceal from ourselves that the difficulties in the way of carrying out a reconstruction of this kind are immense.

The lamentable occurrence that recently took place in a large military hospital at Dublin, resulting in the death of a lunatic patient, has attracted a good deal of attention. The facts, so far as they are known at present, appear to be these:—A lunatic in apparently good health was admitted on the afternoon of May 16th, shortly after the medical officers had made their accustomed evening visit to the hospital. He was seen by them on the morning of the 17th, and on the afternoon of that day he died in the presence of the surgeon in charge of the lunatic ward, who had been called to him on account, as it was represented, of his having been seized with a fit shortly after being removed from a bath. The orderly in charge of the ward had been specially trained in a public institution, from which he brought an excellent character. Many days afterwards some circumstances were reported by a patient which caused a careful inquiry to be instituted into the facts connected with the treatment of the lunatic in question. There could be no doubt that the unfortunate patient had been subjected to gross usage at the hands of his attendants, who had put him, without reference to, or the cognisance of, the medical officers, into more than one cold bath as a punishment for dirty habits; and there is much reason to fear that their conduct on that occasion only formed a portion of the systematic tyranny that had been pursued. Two of the attendants were tried, convicted of manslaughter, and sentenced to transportation. It has since been publicly announced that two medical officers connected with the hospital will be removed; but we are compelled in justice to them to state that, as far as the facts bearing upon the case have come before us, we have no means of deciding whether they ought to be held responsible in any way for the occurrence in question.

The case of the medical officers of the African service was again brought before the House, and this time by Mr. Torrens. We have already said that the regulations appear to have been drawn up in the most lax and misleading manner.

COMPULSORY CERTIFICATION OF CAUSES OF DEATH.

FOR more than thirty years the medical practitioners of this country have rendered voluntary service to the State by gratuitously supplying the local death-registrars with certificates of the causes of death of persons attended by them. The extent of this co-operation with the Registration Department may be gathered from the fact that 83 per cent. of all the deaths registered in 1858 were certified as to their causes, either by the medical attendants of the deceased or by the coroners; 6 persons in 100 died without a qualified medical attendant; the residual cases in which medical certificates were, from whatever reason, withheld amounted to only 11 per cent. More recently it has been ascertained that the proportion of certified cases has increased to 92 per cent., while the cases in which certificates are withheld or are given by unqualified persons has diminished to less than 6 per cent. These proportions relate to the average of the whole country; in London the uncertified causes of death do not amount to 2 per cent.

Whether, apart from the abstract justice of the proceeding, it were wise to disturb an arrangement which has produced results so satisfactory, is open to grave doubt; but that it is in contemplation to place the relation of the profession to the Registrar-General and his officers upon a different footing will be gathered from the following clause in the Government Bill for amending the Registration Acts.

"In case of the death of any person who has been attended during his last illness by a registered medical practitioner, such practitioner shall furnish to some person required by this Act to give notice of such death a certificate to be delivered to the registrar stating truly the cause of death and signed by such medical practitioner, and the cause of death as stated therein shall be entered in the Register, together with the name of the certifying medical practitioner."

The Scotch Registration Act of 1854 made it obligatory upon every "medical person" to give certificates of the causes of death of his patients, it being required of him to transmit such certificates to the registrar within fourteen days after the death of such patients, "under a penalty not exceeding forty shillings in case of failure." In Ireland, the medical attendant is bound by the Registration Act of 1863 to transmit a certificate of the cause of death to the registrar within seven days, but no specific penalty for non-compliance is mentioned. The English Bill now before Parliament differs from both the Scotch and Irish Acts in not requiring the medical attendant to transmit the certificate to the registrar, but simply to give it to the person whose duty it is to inform the registrar of the death—that is, in most cases, to some person in the house where the death occurs. The omission of the penalty for non-compliance may be a large or a small matter according as the Act may be worked; if it is never intended to prosecute, the clause, of course, becomes insignificant, but if the Act were to be rigorously enforced one would rather know the full extent of the liability than be left in doubt as to what the consequences of non-compliance would be.

It is important that the profession should take the earliest possible opportunity of expressing its views about this matter of compulsory certification, and we invite our readers to favour us with their opinions thereon. The Bill was read a second time in the House of Lords on Tuesday last.

SUNSTROKE IN AMERICA.

FOR several days recently the heat in this country was something unusual; but in New York and other cities of America it seems to have been so excessive that telegrams announcing seizures and deaths from sunstroke have replaced those ordinarily sent on subjects of political news. The phenomena of sunstroke and heat-apoplexy are to be mainly accounted for by the action of a superheated blood on the nerve centres and large internal organs. Intense heat applied to the surface of the body may bring about a condition allied to that of concussion of the brain, and death may very rapidly ensue from paralysis of the heart's action. Sometimes a man exposed to the direct rays of the sun is struck down by a veritable *ictus solis*; and sometimes the high temperature of the atmosphere under cover, or at midnight, especially if the air be fouled by defective ventilation, will induce all the phenomena of sunstroke. As everyone knows, the body-temperature of healthy men is nearly identical in different climates. This equality is maintained in hot latitudes by the increased functional activity of the eliminating organs, especially that of the skin, carrying off the superfluous heat. But in cases of sunstroke the increased temperature and dryness of the skin forms one of the most striking features of that disease. The climate of New York during summer appears to be both much hotter and drier than that of this country; and the energetic habits of the more restless, excitable American race tend to induce a feeling of nervous exhaustion, which they seek to counteract by having repeated recourse to a

variety of those stimulating drinks which have acquired a nomenclature of their own. The great safeguard against sunstroke is the healthy play of all the functions of the body. Whatever checks elimination, whatever induces nerve-weariness, or embarrasses the normal working of the organic system, powerfully predisposes to heat-apoplexy. Temperance in all things, sobriety, and that cleanliness which is allied to godliness, are, after all, the main things to be observed by residents in hot climates. When a person is seized with symptoms of heat-apoplexy, the chief aim should be to abstract heat from the body. For this purpose douches of cold water and the freest exposure of the surface to a current of air are the readiest methods of treatment. We have heard of some military surgeons who always, before encamping in India, looked out for a well or puddle of water, into which they place a soldier seized with heat-apoplexy. From the known effects of quinine in reducing temperature, the hypodermic use of this agent is indicated, and it has been employed with apparent advantage in India.

DR. PETTIGREW ON THE CIRCULATION.

IN his ninth lecture on "The Physiology of the Circulation in Plants, in the Lower Animals, and in Man," Dr. Pettigrew gave a description of the structure, uses, and movements of the capillaries and smaller vessels of animals; after which he proceeded to a consideration of the larger vessels and the heart, which is to be regarded as an expanded portion of the vascular system. He divided the capillaries into two sets—the lymphatic capillaries and the vascular or sanguineous. He regarded the lymphatic vessels as the feeders of the vascular vessels, in the same sense that the roots of a tree are to be considered as ministering to its general circulation. In this respect the sanguineous circulation is to be looked upon as an evolution or development of the chyliferous. The capillaries of the lymphatic system, so far as known at present, do not form a through route, but begin in the tissues by blind ends resembling the spongioles of the roots of plants. They therefore form a connecting link between the vegetable and animal. The lecturer drew attention to the presence of white corpuscles in the lymphatics, and their subsequent reappearance in the sanguineous capillaries. He also stated that he had distinctly seen the white blood-corpuscles pass through the walls of the sanguineous capillaries, and that they appeared to incorporate themselves with the surrounding tissues. The sanguineous capillaries differ from the smallest arteries and veins in having a simpler structure, being, in fact, composed of a very delicate, structureless membrane, in which oval-shaped nuclei are embedded. As this membrane is freely permeable by liquids, the tissues are by its instrumentality at once irrigated, nourished, and cleansed. The small arteries and veins are composed—first, of a sheath of fibrous tissue, the fibres of which pursue a more or less longitudinal direction; second, of a muscular layer, composed of flattened, spindle-shaped bands, with elongated nuclei, these bands running transversely or across the vessel; and, third, of a layer of very delicate elongated epithelial cells, the oval nuclei of which are arranged longitudinally, or at right angles to those of the muscular fibres. Some of the larger vessels are possessed of longitudinal as well as circular muscular fibres, and to these elastic and fibrous tissue are added in oblique bands. The lecturer attached much importance to the cross arrangement of the elements forming the walls of the arteries and veins, this arrangement enabling the muscular and elastic elements to work harmoniously together when they increase or diminish the calibre of the vessels. The circular muscular fibres can of themselves increase or diminish the calibre of the vessels. Thus, if heat be applied to a small vessel, it opens or widens, whereas cold causes it to close or narrow. The walls of a vessel thus vibrate on either side of a given line, which correspond to their position of rest. The widening of a vessel is occasioned by an elongation of its muscular fibres, assisted by the pressure of the blood it contains; the narrowing of a vessel is due to a shortening of its muscular fibres. When longitudinal and circular muscular fibres are present in a vessel, and the vessel is to be widened, the circular fibres elongate in the direction of the breadth of the vessel, the longitudinal fibres shortening in the direction of the length of the vessel. The converse happens when the vessel is to be narrowed. When a cavity (say the ventricle of the heart) is to be obliterated, the longitudinal and circular fibres shorten and broaden in every direction; when the cavity is to be increased they lengthen and narrow. This invests muscle with a centripetal and centrifugal action. When a limb is to be flexed the flexor shortens and the extensor elongates. This does away with the necessity of the muscle which shortens forcibly dragging out that which lengthens, which is a mere waste of power. Muscles when not acting enjoy absolute repose, and are not in a state of tonic contraction, as it is termed. This is contrary to the commonly received opinion, but it nevertheless appears to give the true cue to muscular movements, whether voluntary or involuntary. The lecturer stated his belief that the voluntary muscle was a differentiation of the involuntary. When a voluntary muscle shortens (contracts) it swells out in parts, and presents a waved appearance, the sarcous elements or squares of which the muscle is composed changing shape also. Thus in the swelled parts the long axis of the sarcous elements are directed transversely or across the muscles; whereas in the parts between the swellings, the long axis of the sarcous elements are turned in the direction of the length of the muscle. This implies the presence of two forces acting at right angles to each other, and a power inhering in the sarcous elements of muscle of shortening and elongating. The lecturer claimed for the whole muscle the properties which he believes inheres in its sarcous elements. That muscles have the power of elongating is proved, according to him, by the movements of the worm. This animal is invested with a tunic composed of longitudinal and circular muscular fibres. When it moves it pushes out, telescopic fashion, the first inch or so of its body. This part is then shortened, and another inch sent on until the tail is reached and an inch of ground gained. The body of the worm is alternately narrowed and thickened, as in ordinary muscle when in action. The thick portions of the worm may be compared to the bodies of hollow viscera, the narrow portions to their sphincters. When the thick portions become narrow to expel their contents, the thin portions, which represent the sphincters, widen, and allow the contents to escape. The lecture was illustrated by a large number of original diagrams.

MAISONS DE SANTÉ.

IN another place will be found an account by a Parisian correspondent of the Maison Municipale de Santé. Our correspondent enters at some length into the details of management of that great establishment, which seems to us to fulfil a more truly charitable mission than many of the hospitals in which the relief afforded is wholly gratuitous. We heartily wish we could see some serious attempt made in this overgrown city of ours to imitate the example which is set us by Paris. Many of our readers may have had actual experience of, nearly all must have witnessed at one time or another, the misery of being stricken with illness in a lodging-house. Such an occurrence, provided the lodger

has no infectious disease, is regarded usually by Mrs. Lirriper as a rare opportunity of swelling her little bill with endless items, and the poor clerk or student has not only to put up with the insufficient and slovenly ministrations of the dirty servant (who, in addition to her other work, has to be constituted an amateur nurse for the occasion), the ill-prepared and ill-suited diet provided by the landlady, who reminds him every day that "cooking was not included in the eighteen shillings a week," the hopeless and unhealthy state of dirt and muddle into which his room is gradually drifting, and the other inconveniences, too numerous to particularise, but which are often positively injurious to a sick man, which illness under these circumstances certainly entails; but he is perhaps tormented as well by the reflection that his meagre salary will be sorely taxed by the "extras" of the landlady, of whom probably it cannot be said that—

"When affliction wrings the brow,
A ministering angel thou."

If a clerk or student breaks his leg or falls ill in Paris, he need not be exposed to the annoyances we have indicated. He can go to the Maison de Santé, and in exchange for twelve, eight, or even four francs a week, he can ensure cleanliness, attention, comfort, and medical skill, combined with all the privacy of his own rooms. We feel certain that an establishment of this kind in London, if properly conducted, would find great favour, and would certainly pay its way.

PROFESSIONAL REMUNERATION IN FRANCE.

THE small fees vouchsafed to the medical, as contrasted with the heavy ones bestowed on the legal, practitioner in France have caused some discussion of late across the Channel. The difference, our French brethren maintain, is justified neither by the relative importance of the services nor by the conditions under which they are rendered. If health is more precious than fortune, the conserver of the former should be entitled to a handsomer reward than the conserver of the latter. Again, there is rarely that urgency in the advocate's business that there is in the medical man's. The "law's delays" are notorious, ensuring the advocate abundant leisure for considering his client's case. The physician is as often as not summoned at a moment's notice, and must diagnose and prescribe or perform with decision as well as promptitude, whatever effect his course may have on his professional or public reputation. *Agitur de pelle humana.* Further, the advocate runs no risk of his life in practice. The physician, on the contrary, frequently falls a sacrifice to his professional duties—often succumbs, as a student, to the peculiar conditions of pathological and clinical investigation. Yet how is he remunerated? Take the minimum tariff of the practitioner in the arrondissement of Liège: For a simple domiciliary visit, or advice given at his own residence, 3 fr.; for a first visit of urgency or in the evening, 6 fr.; consultation during the day, 15 fr., and during the night, 25 fr.; night visit (from 10 P.M. to 7 A.M.), 15 fr.; for every hour spent with the patient during the day, 15 fr., and during the night, 20 fr.; for certificates, according to their nature, from 5 fr. to 20 fr.; for written advice, 5 fr.; for written consultation, 20 fr.; while visits out of town are charged to the patient at the rate of 20 fr. per league. Again, in minor surgery, for bleeding, tooth-drawing, and simple cautery, the fee is 5 fr.; for opening abscesses, catheterism, bandaging, and vaccination, from 10 fr. to 15 fr.; for reduction of a hernia, tapping a hydrocele or an ascites, 25 fr.; for reducing a dislocation or fracture, and for the puncture of empyema (not including ulterior treatment), 50 fr.; lastly, for a simple labour case, 75 fr. This scale of remuneration, be it observed, is that adopted in self-defence by the physicians of a particular arrondissement; in districts not so well off the tariff is less, often much less. It is the feeling of the profession, however, that each member should resolve to follow the barrister's rule, and, taking into account the importance and probable issue of the case, the studies he has pursued, his client's fortune, and so forth, should demand a round sum. As things at present are in France, no law, no regulation fixes the fees betwixt patient and practitioner. Legal medicine alone, administrative or judiciary, enjoys a legalised regular tariff.

THE DUBLIN SANITARY ASSOCIATION.

WE have received from Dublin a prospectus of a Sanitary Association which it is intended to form in that city, having for its objects to create an educated public opinion with regard to sanitary matters in general, to direct attention to points in which existing powers or machinery are inadequate to the public requirements, to watch the course of sanitary legislation, and to form a body in which the public may have confidence, and through which they may, if necessary, act. Of the machinery by which these very laudable objects are to be attained we learn nothing; but we are furnished with the names of thirty-eight gentlemen who have consented to act as a provisional committee. Among these we find seventeen who are members of the medical profession.

The formation of a Sanitary Association with such objects, and with powers at all adequate to the resistance to be overcome in attaining them, would be an achievement of which any city might be justly proud. We seem to remember hearing of some kindred scheme in London a few years ago, which failed because its promoters could not realise the magnitude of the work they were taking in hand. We trust that the Dublin committee will not fall into a similar error, but that they perceive at the very outset the need for ample funds and untiring energy. In order to create an educated public opinion a costly machinery must be diligently employed, and must be employed by those who will neither expect an early harvest nor be dismayed by an apparent failure. The obstacles in the way of sanitary reform are mainly ignorance and selfishness—twin giants, in whom the new association will find enemies of prodigious power and inexhaustible vitality. If the movement should meet with support in Dublin it might with advantage be made imperial, and the parent association might establish branches in all the great centres of population.

ROYALTY AND THE CONVALESCENT HOME AT HIGHGATE.

WE were happily able a few weeks ago, by the kindness of the munificent donor, to anticipate the descriptions which have appeared of the Convalescent Home at Highgate. The visit of the Prince and Princess of Wales on Monday last gives additional interest to this institution, and will the more cause its working to be studied by the public, and by practical philanthropists like-minded with Sir Sydney Waterlow. Even had the Prince not been President of St. Bartholomew's Hospital, of which for the next seven years at least, this delightful and complete home is to be a part, his presence would have been not less worthy and gracious. For of all forms of charity, help to convalescents is one of the most wise and satisfactory. And in this case the help will be made to depend, not on the accident of the result of an eagerly contested election, but on the advice of the physician or surgeon who has watched the case in the hospital. We congratulate the medical officers of St. Bartholomew's on this addition to their means of cure, which will powerfully conduce to the success of their endeavours in many

an anxious case. And we shall almost covet Sir Sydney's reflections when he has for neighbours at Highgate the recovering sick, who to the number of about 900 a year will find a home in Lauderdale House.

THE STRUCTURE OF NORMAL AND VARICOSE VEINS.

DR. S. SOBOROFF has lately undertaken a series of researches on the structure of healthy and varicose veins, the results of which possess considerable interest. He had at his disposal eight specimens of varicose veins, which, with only one exception, were accompanied by pathological changes in the vena saphena. These were all capable of being arranged in two groups: in both the lumen of the vessels was greatly enlarged; but in one the walls were thickened, in the other they were attenuated. The preparations seem to have been prepared with great care, some being silvered, to show the epithelium; others subjected to the action of chloride of gold, chloride of palladium, and chromic acid. The principal fact that he has definitely ascertained is that a dilated venous trunk, even when possessing almost perfectly transparent walls, contains colossal muscular fibre-cells. These are so large that when first observed they were regarded as fasciculi of unstriped muscle, but more careful examination, aided by staining experiments, showing the well-marked outline of the cells and the rod-shaped nuclei, clearly demonstrating that fibre-cells alone were under the microscope. The adventitia of the thin dilated veins was thin and but sparingly supplied with vessels, and the epithelial lining of these attenuated vessels was apparently continuous and unaltered. In the thickened and dilated veins, on the other hand, the adventitia was hypertrophied, and the vessels distributed to it were large and numerous.

THE LAW OF MIDWIFERY FEES.

A FEW months ago we commented on the disallowance of a midwifery fee by a County Court judge, in a case where the practitioner, though engaged, had not been sent for, as not only unjust to the practitioner, but calculated to be injurious to the public, by lessening the sanctions of midwifery engagements. We are happy to be able to put on record an opposite ruling on this important question by Mr. Macnamara. The case of Daniell *v.* Carr, reported in another column, will be read with interest by the profession. The wisdom and justice of Mr. Macnamara's words on midwifery engagements are especially worthy of remark. We have lately had to differ very seriously from a decision of Mr. Macnamara in regard to the legal rights of medical men. We are the more glad on this occasion to agree with him. No engagements are more inconvenient and hindering to medical men than obstetric ones, the actual detention in attending the case being often only slight. It is, therefore, but right that Mr. Macnamara should have followed the usual course of County Court judgments, and allowed the fee, although at the last the practitioner was not sent for.

THE NEWCASTLE-ON-TYNE INFIRMARY.

THERE is some difference of opinion in this important institution between the medical staff and the house committee as to the number of assistant surgeons and resident dressers required in the infirmary. The difference has been occasioned by a desire that is felt to use the infirmary as a training school for nurses. According to the rules adopted in 1869 a class of "probationers" was to be added to the ordinary nurses. Clearly nurses can only learn their duties thoroughly in hospital, and the training of nurses is to be regarded as one of the chief secondary uses of an infirmary. There is only one secondary use of a hospital of more importance, that is the education and training of surgeons. It will be a dear way of providing accommodation for those learning to be nurses to reduce the number of assistants, clinical clerks, or dressers, which seems to be the plan of the House Committee for finding room for the probationers. This would be robbing Peter to pay Paul. We cannot doubt that the House Committee will find a way of making the infirmary available for the purpose of training nurses without diminishing its advantages as a medical and surgical school. Some severe remarks on this last point have been made in the local papers. Obviously it would be neither for the interest of the patients of the hospital nor of the students of the Newcastle School that the clinical offices of the hospital should be diminished.

THE SEAMEN'S HOSPITAL, GREENWICH.

IT is very remarkable that, while the great hospitals of the Royal Navy have for the last three years been most satisfactorily worked, under the sole authority of a medical officer in place of the formerly existing captain-superintendent, the Seamen's Hospital at Greenwich should be making progress in exactly the opposite direction, a layman being appointed to supervise the medical men. When the old *Dreadnought* was in use the senior medical officer was the superintendent, and has continued until recently to exercise the same functions. Now, however, when comfortable quarters on shore are added, the Secretary of the Society, who formerly resided in London, has persuaded the old naval officers who rule the institution, and who are no doubt glad to avenge the wrongs of their fellows in the matter of naval hospitals, to appoint him house governor, and to him the medical officers are to be responsible, even (in the case of the juniors) to the extent of asking leave of absence.

We are not surprised to hear that such an arrangement has been protested against by the entire medical staff, and that Dr. Swan, one of the house-surgeons, has preferred to vacate his office rather than submit. The whole matter is so preposterous that we feel certain that some alteration must be made if the hospital is not to be deprived of all its officers, for no professional man will submit to such treatment from a lay committee.

EMPLOYMENT OF WOMEN.

THE exemption of women from mining labour will, we hope, be followed up by the concession of shorter hours of work to women and girls employed as milliners and dressmakers. Factory women are allowed by law to work only twelve hours a day, with an hour and a half out of that time for meals, the working period being from 6 A.M. to 6 P.M.; but milliners and dressmakers are made to work fourteen hours between 8 A.M. and 10 P.M., to their moral, mental, and physical detriment. The Home Secretary's power of granting to certain "season" trades liberty to work occasionally long hours has led to a wholesale and general infraction of the law; while the persons who complain either lose their situation or their life's comfort. The old difficulty of satisfying both employers and employed is the Home Secretary's excuse for not interposing in behalf of the poor needlewoman or milliner; but we hope a really comprehensive Public Health Act will restrict the licence given by Parliament to "season" trades—the licence to work long hours and to minister to the pleasure of the few through the privation of the many. No physician can help being interested in procuring for so large a section of the population the physical and moral conditions requisite to maintain a healthy motherhood and a vigorous progeny.

VARIATIONS IN WOMEN'S MILK RESULTING FROM INSUFFICIENT FOOD.

DR. DECAISNE lately reported to the Académie des Sciences the results of his observations on forty-three women who suckled their infants on insufficient food during the siege of Paris. Such women either produced abundant and good milk and their children throve, whilst they themselves became greatly emaciated; or they produced but little milk and that of a bad quality, so that the children throve badly, and for the most part suffered from choleraic diarrhœa; or, lastly, they produced scarcely any milk, and the children died. The following table shows analyses from the three various types:—

		Butter.	Casein.	Albumen.	Salts.	Sugar.
1.	Fasting ...	3·10	0·24	2·20	0·20	6·24
	Well-fed...	4·16	1·05	1·15	0·30	7·12
2.	Fasting ...	2·90	0·18	1·95	0·16	7·05
	Well-fed...	5·42	1·15	0·95	0·25	7·05
3.	Fasting ...	2·95	0·31	2·35	0·31	5·90
	Well-fed...	4·10	1·00	1·75	0·31	5·95

It is interesting to notice that the albumen and casein taken together are nearly the same both in the fasting and the well-fed state, though they seem to have an inverse relation to one another.

HARVEY TERCENTENARY MEMORIAL.

MR. EASTES, the honorary secretary, writes to inform us that since our last notice of this subject on June 22nd, the following noblemen and gentlemen have joined the London general committee—viz., the Duke of Devonshire, K.G., the Lord President of the Council, the Bishop of Ripon, the Bishop of Exeter, the Chancellor of the Exchequer, Mr. Philip Cazenove, Drs. Bennett, Sibson, and Munk (Censors of the Royal College of Physicians), Mr. Cæsar Hawkins, Dr. Billing, Mr. Bowman, Dr. Carpenter (Registrar of the University of London), Dr. Sharpey (Secretary, Royal Society), Dr. T. K. Chambers, Mr. Curling, Dr. Arthur Farre, Mr. Cooper Forster, Dr. Fuller, Dr. Gream, Mr. Hancock, Dr. Hare, Mr. Prescott Hewett, Dr. Grailly Hewitt, Mr. Hilton, Mr. Barnard Holt, Sir Ranald Martin, Mr. N. Montefiore, Mr. W. S. Savory, Dr. Oldham, Dr. Pavy, Mr. G. Pollock, Dr. Priestley, Mr. R. Quain, Dr. Russell Reynolds, Dr. Radcliffe, Mr. Sibley, Mr. W. Fuller, Dr. Sieveking, Dr. Tyler Smith, Dr. C. J. B. Williams, and others. Mr. Eastes will be happy to receive the names of gentlemen wishing to join the committee.

The sum required is about £3000, and the amount already subscribed is £480. Donations may be sent to the account of the "Harvey Tercentenary Memorial Fund," at the Western Branch of the Bank of England, Burlington Gardens, London, W. A meeting of the London Committee will be held during the present month at the Royal College of Physicians, Pall Mall.

The cards and circulars which the Vicar of Folkestone continues to forward to members of the medical profession, soliciting donations for a stained-glass window in the parish church of Folkestone, are not sent by the authority of the Harvey Tercentenary Memorial Committee.

MEDICAL QUALIFICATIONS IN JAMAICA.

THE Legislative Council of Jamaica will do well to pause before it passes "a Bill to amend the Laws relating to Medical Practitioners." This Bill would open a gate that would admit to the profession not only those holding Canadian diplomas, but diplomas *recognised in Canada*. We have no sympathy with territorial narrowness in the recognition of medical qualification. If examining boards were what they ought to be, and if the laws regulating medical practice permitted only such as have passed satisfactory boards to be registered and to practise, we should be in favour of the fullest international recognition of diplomas. But it is notoriously otherwise. Examinations in many parts are formal, and altogether inadequate to their purpose. A system of selling diplomas on a wholesale scale has just been exposed at Philadelphia; and though the General Assembly of Pennsylvania has repealed the charters of the offending American colleges, a great deal more has to be done in the United States, and even in Canada, before their diplomas can be recognised by England, and before they should be recognised by her colonies. It is a grievous hindrance to the progress of the science and art of medicine when care is not taken to exclude all but competent men from the profession.

THE VACCINATION AMENDMENT BILL.

MR. PEASE'S Bill to "amend" the Vaccination Acts, by allowing persons who refuse to have their children vaccinated to escape scot free after the payment of a single penalty, was so emphatically disapproved by the House of Commons on Wednesday that Mr. Candlish was compelled to resort to the device of talking until the arrival of the hour for the adjournment of the debate. By this means he avoided a hostile division; but the question may be regarded as settled for the present session at least. If Mr. Pease should at some future time reintroduce his Bill, we would advise him to simplify it, and to provide that a parent objecting to vaccination might pay his pound to the registrar, and record his objection, thus saving all trouble to vaccination officers and magistrates. Put in this light, the character of the measure would be more clearly manifest than at present; but we suspect it would not be more likely to conciliate support. The object of the law is not to extort penalties, but to enforce vaccination, and penalties are only useful in so far as they conduce to the attainment of this object. If a single penalty conferred future immunity, it would be better to abandon altogether such a pretence of punishment.

CATERHAM ASYLUM.

AN official visit was paid on the 6th inst. by some of the managers of the Metropolitan Asylums Board to the Asylum at Caterham, under the guidance of Dr. Cortis, chairman of the Asylum Committee. This building stands in seventy-five acres of ground, has 1645 inmates, and is devoted exclusively to incurable cases drafted from metropolitan union workhouses. The committee have adopted the dry earth system, and also the application of wet sewage to the land with very successful results, the crops having proved most satisfactory. The supply of water is derived from artesian wells. Gas is made on the estate, at a cost of 1s. 4½d. per 1000 cubic feet.

THE RECENT FOSSIL MAN.

IN the early part of the year a somewhat startling announcement was made of the discovery of a human skeleton, under circumstances which suggested its great antiquity, in one of the caverns of the Italian frontier near Mentone. As to the discovery of the skeleton in question by Dr. E. Rivière, a scientific *savant* appointed by the French Government, there can be no doubt, whatever there may be about its age. The cavern is situated in Oolitic or Jurassic limestone near the line of railway from Mentone to Vintimille, and the skeleton was found beneath a layer of earth of considerable thickness. It is that of a man of ordinary size, and, with the exception of the ribs, is very perfect. Those who may desire to become acquainted with

further details may refer to an article, with an excellent illustration, in the *Popular Science Review* for the current month. From the position of some stones discovered in connexion with the skeleton, it seems pretty clear that it was a case of burial, the stones roughly marking out the place of sepulture. No remains of extinct animals occur above the skeleton. One observer refers the skeleton back to the stone age, and not an early part of it. The report of Dr. Rivière is waited for with much interest. When this is published we shall know all the facts and their bearing on the age of the skeleton.

INTERNAL USE OF CARBOLIC ACID.

Now that this acid is being tried internally, we should ascertain in what doses it may be poisonous. MM. Paul Bert and Jolyet, of Paris, have undertaken experiments to make out this point. Between forty-five and sixty grains will kill a dog of large size; nor should it be concluded that man could bear a dose in proportion to his weight compared to that of the dog, as thirty grains of hydrochlorate of morphia have been injected into the jugular vein of a dog without killing him. Of course one-fourth of this dose would kill a man. The above-mentioned authors state that carbolic acid is a powerful poison, which, very imprudently, is left in the hands of anybody, either in solution or in the solid state. The former is the most dangerous, as some weak solutions for internal use are sold, as well as very strong ones intended for external use. Thus mistakes may easily occur. MM. Bert and Jolyet find that carbolic acid acts like strychnine on the excitability of the spinal marrow. It increases its sensibility, like strychnine, at first; but it diminishes that sensibility, or completely abolishes it, when the convulsive stage has exhausted the medulla. The phenomena resulting from carbolic acid are said by our authors to be quite similar to those produced by chloroform, chloral, ether, woorara, and the section of a motor nerve.

THE CONTAGIOUS DISEASES ACT IN INDIA.

WE regret to learn from the *Bombay Gazette* that the working of the Contagious Diseases Act in India has encountered the opposition of the Bench of Justices of Bombay. Indian magistrates do not appear to be a whit more enlightened or liberal than the "great unpaid" of this country, for when called upon by the Government to contribute from the municipal funds their *quota* towards the expenses of carrying out the Act, they passed the following resolutions:—

"1. That Government be informed, in reply to their resolution, No. 38, General Department, dated 4th January, 1872, that the Bench have no intention to contribute to the expenses for 1872 of the Contagious Diseases Act. 2. That the Justices decline all responsibility for the lease of the Lock Hospital, which they now learn, for the first time, was executed by the late Municipal Commissioner, on the 18th January, 1871, without knowledge or authority. 3. That the Municipal Commissioner be requested to discontinue at once the connexion of all officers of the Municipality with the working of the Contagious Diseases Act."

We trust Lord Northbrook has both the power and the will to bring these recusant justices to a proper sense of their duty to the community at large.

ACCIDENT AT WIMBLEDON.

AT Wimbledon on Tuesday the firing at the range was interrupted by one of the markers, Private Thomas Lane, 27th Regiment, receiving a splash of lead in the forehead. On being conveyed to the hospital-tent, the injury turned out to be superficial, though the hæmorrhage was considerable. The man had been exposing himself unnecessarily. Casualties at Wimbledon are rare; but if they become, from some cause or other, more numerous, the volunteers may congratulate themselves on the efficient surgical aid afforded in the field hospital near the windmill. The staff have had much experience in the late continental campaign.

CHOLERA.

THE Austrian authorities at Trieste and Fiume have established quarantine on all vessels arriving from any port in the Black Sea, and the health authorities at Lisbon have also by general order made the same arrangements.

A St. Petersburg paper reports that cholera has appeared in that city, and that two persons have died from the disease in the Oboukhof hospital. At Moscow, seventy-three cases occurred between the 1st and 16th of June, and on the 17th twenty fresh cases were reported, the rate of recovery being about one in eight.

Up to the 21st of June there had been 1001 deaths at Kiew, while 517 cases were still under treatment at that date.

A vessel, just arrived from Christianstadt, was detained for some hours in quarantine off Gravesend on the 5th inst.

DIPHTHERIA AND TYPHOID IN TYNEMOUTH UNION.

LONGBENTON, a sub-district of Tynemouth Union, was visited in the last quarter of 1871 with diphtheria. All the victims were children under six years old, and the recoveries were fewer than the deaths. There was no evidence that the disease had spread by contagion; but in the poorer parts of the township the house arrangements, privy accommodation, excrement removal, and sewerage, were all below the standard consistent with health. Improvement of the dwellings, especially in point of ventilation, better arrangements for the removal of excrement, and increase of the privy accommodation, are the recommendations proposed by Dr. Hubert Airey, who was deputed by the Local Government Board to investigate the causes of the outbreak of diphtheria.

Fever also was rife during the same period in the Union, enteric being the type in every one of the thirty-two deaths. Bad smells and sewer air rising from the kitchen sink were complained of by the inmates of the houses in one township, while the water was far from pure, the sewerage by no means satisfactory, and the means of excrement removal inadequate. The hospital accommodation (according to Dr. Hubert Airey) was seriously defective—all the more so that the small-pox epidemic prevailed at the same time.

COLONEL ANSON.

WE regret to hear that Colonel Anson had a relapse several days since at Danbury Palace, where he is staying for change of air. Dr. Nicholls, of Chelmsford, who is in attendance upon him, deemed it necessary to send for Mr. Manley Sims from town. We are glad to learn that the symptoms are subsiding, and from the latest report Colonel Anson is doing well.

SHANGHAI ITEMS.

DURING the past year an epidemic of whooping-cough visited the town for the first time; while an eruptive fever, considered by some of the European practitioners to be dengue, and called by the natives "wind measles," was very prevalent. Taxation of the native brothels is now carried out with a view of providing a fund for the establishment of a lock hospital.

AT an inquest held last week on the body of a French lady who died from heart disease, a New York physician, Dr. Petitjohn, who was called as a witness, stated that for twenty years he had been coroner in New York, and that in that city the jury was always composed of six persons, a number which was found to answer admirably. Dr. Lankester admitted the effectiveness of such a plan in ordinary cases, but thought that in serious and difficult cases it was advisable to summon a jury of twelve.

FROM the last returns of the water companies as published in the Weekly Return of the Registrar-General we gather the fact, rather striking as it appears to us, that whereas the Southwark Company were supplying 78,865 houses in May last, as compared with 78,406 houses in May, 1871, the average daily supply was less by 12,164 gallons in May, 1872, than it was in May, 1871.

THE Channel Fleet is in the Clyde. It will, therefore, not surprise those of our readers who know anything of Glasgow to hear that the Medical Staff of the Fleet has been entertained at dinner by the Faculty of Physicians and Surgeons, under the genial presidency of Dr. Fleming. The dinner was given on the evening of the 8th instant. The company numbered about forty.

Mr. H. WILSON, surgeon to St. Mark's Ophthalmic Hospital, and Examiner in Ophthalmic Surgery Dublin University, has been appointed to the Professorship of Ophthalmic and Aural Surgery in the Royal College of Surgeons in Ireland. This professorship, the first of its kind in Ireland, has been recently established.

AT the last meeting of the Metropolitan Asylums Board it was resolved unanimously "That when Hampstead Hospital is no longer required for the treatment of small-pox cases, it shall be thoroughly disinfected, and arrangements made for receiving therein imbeciles, chiefly to be those of the infirm and bedridden class."

HER Majesty the Queen and Royal Family have left Windsor for Osborne, and will not return to the castle until the extensive works now in progress for its better drainage are completed. January is given as the probable month of Her Majesty's return to the castle.

DR. B. W. RICHARDSON, F.R.S., has been appointed Honorary Physician to the Newspaper Press Fund. Dr. Richardson is connected by a similar position with the Royal Literary Fund.

MR. CARDWELL, in answer to a question in the House of Commons on Monday, stated that no alteration had been made since 1859 with regard to medical officers serving on the coast of Africa.

DURING the week ending July 6th the mortality in London and twenty other large towns was at the rate of 21 deaths annually to every 1000 of the population. In the metropolis the deaths were considerably below the average of the corresponding period for the last ten years.

"DR." HAMILTON'S case has been postponed by the magistrate until Tuesday, the 16th instant.

WE much regret to learn that Dr. Rawdon Macnamara's condition still continues to cause much anxiety.

THE heat in India, by the latest accounts, was increasing in intensity.

MR. FORSHALL, the medical officer of health for the Highgate district, has made special reports on the insanitary condition of many of the houses on the North Hill and its neighbourhood.

THE cultivation of chinchona in India is now an assured success, 51,353 lb. of the fresh bark having been supplied by the Government plantation at Ootacamund during the past year.

FOOT-AND-MOUTH disease is rapidly spreading in Somersetshire.

OBSTETRIC FEES.

IMPORTANT DECISION IN THE BROMPTON COUNTY COURT.

(*Before* MR. MACNAMARA, Judge.)

DANIELL V. CARR.

THE plaintiff in this case was Dr. Daniell, of Cathcart-road, South Kensington, and the defendant Mr. Arthur Carr, a gentleman who formerly resided in Maude-grove, Chelsea, but who has since removed to Peckham-rye. The plaintiff's claim for professional attendance amounted to £87 3*s*., of which £42 5*s*. 2*d*. had been paid on account, and £6 10*s*. paid into court; a credit of £10 18*s*. 6*d*. was also admitted for an octave of wine which the plaintiff purchased from defendant. This left a balance of £27 9*s*. 4*d*., which was disputed.

Mr. Newman appeared for the plaintiff, and Mr. Gammon for the defendant.

It appeared from the evidence of the plaintiff that in the year 1864 he commenced to attend the defendant's family, and in the year 1867 an arrangement was made that he should be paid twenty-five guineas a year for attending professionally on defendant and family, and that, in addition to the above charge, confinements and vaccination fees were to be charged extra at the rate of £5 5*s*. and £1 1*s*. respectively. In 1868 two of defendant's children were vaccinated, and the sum of £2 2*s*. was charged for this, in addition to the twenty-five guineas for attendance during the year. This arrangement continued in force in 1869 and 1870, and in the latter year the defendant retained plaintiff's services for the approaching confinement of his wife, but before the accouchement took place defendant removed from the locality to his present residence, and when the confinement took place plaintiff was not sent for, although the distance was not so great but that he would have been in ample time. Under these circumstances he claimed the fee of £5 5*s*., as agreed upon with defendant, and explained to the learned judge that it was the custom in the profession to be paid in those cases where a medical man was retained beforehand, whether he was sent for or not, provided that it was not his own fault that he was absent.

Dr. Roberts, Dr. Thomas Godrich, and Dr. Thurston gave confirmatory evidence in this particular.

The remainder of the claim was for half a year's attendance, which the defendant disputed on the ground that he had removed from the neighbourhood and did not consider that he was indebted to plaintiff for more than the time he attended while he was living in the locality.

His Honour, in summing up the case, remarked that, as medical gentlemen held these engagements as a most sacred trust, and as it was the custom in the profession, it was only right that they should be paid their fee if they were absent through no fault of their own, as in the present instance. With regard to the half-year's attendance, he was bound to admit the argument of the plaintiff's advocate (Mr. Newman), that in a contract of this description a medical man might have all his work to do in the first three months of the year, thus making it obviously unfair that such an arrangement should terminate without notice at any time the defendant chose. After these facts, he should allow the plaintiff for the half-year's attendance and also for the confinement fee of £5 5*s*., and £2 2*s*. vaccination fees. Accordingly, his judgment would be for the plaintiff for the full amount—viz., £27 9*s*. 4*d*., with costs.

This was a case sent down for trial from the Court of Common Pleas.

Correspondence.

"Audi alteram partem."

SPECIAL HOSPITALS.

To the Editor of THE LANCET.

SIR,—The communication of your Dublin correspondent in your last issue suggests to my mind the following ideas, to which I shall feel obliged by your affording expression through the same medium.

The subject of special hospitals is one of vital importance to all members of the profession, alike from its moral and its social bearings. I have given the subject some attention, I have had the temerity to give my opinions upon it free expression, and I think, with not a little success, if the animosity which I have encountered and the number and influence of my assailants, be, as I think they ought to be, some criterion thereof.

My paper on the subject of "Medical Reform" read before the Medico-Chirurgical Society of this city excited attention equally without as within Scotland, and even in the colonies. My successful defence of it against the puny attacks of interested parties is in your columns, and it occupies a place in medical literature, so far as its truth is concerned, unrefuted and irrefutable. This paper, therefore, and many others of a kindred nature in a local medical journal, give me, I think, a claim to be heard, more particularly when I may be supposed by some parties to be the advocate of different tactics.

"A new infirmary for diseases of the eye and ear was opened on Thursday last in this city" (Dublin), says your correspondent, in addition to two eye and ear hospitals previously established. I pass over giving expression to some curiosity as to what the duties of "consulting obstetrician" to an eye and ear hospital may be, to remark that invariably in giving expression to my views on medical charity, I argued on the thesis, that on abstract grounds, both public and professional integrity demand that the distribution of any charity whatever should not exceed the unostentatious and unselfish giving of that of which the recipients stand in urgent need, and which they are unable to procure otherwise than through the particular medium in operation. I have so frequently urged, amplified, and illustrated this argument that I am heartily tired of it, and I doubt not that not a few of my "friends" are likewise. Notwithstanding all this, it is nevertheless an unassailable position on purely abstract grounds, though from a fiscal point of view it may be untenable to take that view of individual property, the property in case under consideration being medical knowledge. It may justly be urged that a man may do what he pleases with his own, more particularly in a thoroughly utilitarian and progressively demoralising condition of society. I think, however, that a man ought not and should not be permitted to do what he likes with his own if thereby he creates public evil.

Society as at present and as it has been hitherto constituted (I am afraid to speak of the future) is composed of numerous grades; there is an incessant unrest for the assimilation of the one into the other, education striving against mammon, and brute force against intelligence. In the fortuitous issue of circumstances it eventuates inevitably that in the seething, bubbling, Stygian streams of existence, one sinks while the other, the *novus homo*, rising in his place, makes his ungainly *début* in the giddy stage of social life, reeking with very corruption, and pleading unmistakably for that worship which it is man's peculiarity to bestow, and his chiefest pleasure, to so great an extent, to receive.

By a legislation at once wise and honourable to us, under these circumstances, it is provided that no man shall want for the necessaries of life (medical attendance included) providing he give satisfactory evidence to the authorities that he stands so in need of them, and that his *res angusta domi* is such that he is personally unable to command them. Given, therefore, an *adequate* public organisation for the furnishing of food and medical attendance to "God's poor," who have possibly been reduced to this state by robbery on the part of some other of God's people, it would appear—perhaps to the least penetrating intelligences—that nothing more should be done, and that anything further would demoralise the recipients of a mistaken bounty and be actually an injustice to him who strives to earn an honest livelihood either by the vending of food or medical attendance, his only legitimate possessions or commercial commodity. It may be expostulated that whatever tends to induce undue competition, tends in that ratio to the corruption of the department or calling affected; and that medical practice is so influenced I accept as one of the greatest, the most striking, and saddest facts of this corrupt age. That, I suppose, is the Utopian view of it. Let us glance now at the commercial or utilitarian view of medical charity, and the obligations of members of our profession, as honourable men, to the profession as a body, and to society.

A deeply-rooted instinct of the human mind—a noble one when nobly exercised, a detestable one when self-glory and individual preferment is its motive power—is that of benevolence, philanthropy, or whatever else it may be called. Its essence is a desire to give to the abject that of which he stands in need, and which he cannot procure, with as little detriment as possible to the manliness of the recipient, with no anticipation of benefit to the donor. It is an instinct essentially human—essentially divine. In the one case, it cannot be too highly commended; in the other, it is simply not charity. It follows, then, that ample provision being made for the destitute, nothing more ought to be done; and this, I unreservedly confess, presupposes even the non-existence of those large charities which exist in the form of general hospitals or infirmaries. And I am prepared to argue and to contend that the objections which apply to special dispensaries must, and do, apply to infirmaries in a properly constituted state of society.

What is the function, so to apply the term, of an infirmary or general hospital? It is to afford medical relief, it will be answered, to the poor, particularly the artisan class (the toy *par excellence* of the age), when they are incapacitated from injury, or other accident, for work; and, secondly, to afford instruction to the rising generation of medical practitioners. With respect to the first object contemplated, I would ask, What right have the artisan class to be treated for nothing when they are better paid than many gentlemen in the medical profession, who cannot stoop to practise medicine save conformably to possibly old-fashioned ideas of honour, and when thereby junior practitioners are thus pilfered of patients who, in the natural course of events, would fall legitimately to them for treatment? I say, no right whatever. It is a duty which the well-paid artisan owes alike to himself and to society to provide against sickness and accident, as much as it is incumbent on the so-called "gentleman" of a liberal profession. And it is not one whit more humiliating for the artisan to accept support or medical attendance from the parochial board than it is for some unquestionable gentlemen of my profession to accept the proceeds of the professional "hat."

Stop this charity and the working man will not be poor, he will not be improvident, and he will not be drunken; if it should so happen, a contingency possible in the life of all men, that a season of distress shall find him out, he will be provided for by a wise legislation, and more liberally because taxation will be less; members of the medical profession will receive that to which they are (at least some of them) entitled to look for, a respectable livelihood, and a moderate provision against chilling misfortune; and the parochial board, the only defensible form of charity, will be otherwise employed than in begetting pauperism, blackguardism, and crime. But alas! such will never be; if perchance some such arrangement will not commend itself to Dr. Cumming and his millennial friends (for is he not to live till then?) when the wolf shall lie down with the lion and the lamb, and lying and professional corruption be historically referred to the latter part of the nineteenth century. And why will such things never be? Simply because the primary consideration with most men is to get rich, no matter how, and then show people by their "benevolence," and such like, that they are so, and thus secure the sole beatitude of the possession of a little more filthy lucre than their honest neighbours. "What sort of reformers and workers are you that work only in the rotten material? that never think of meddling with the material when it continues sound; that stress and strain it with

new rates and assessments, till once it has given way and declared itself rotten, whereupon you snatch greedily at it, and say, Now let us try to do some good upon it."

But, further, do our public hospitals, if we concede, *causa argumenti*, that there exists a *raison d'être* for them for the artisan class—do they, I say, limit their "benevolent" operations to this class? Of a surety they do not. It is a notorious fact, a crying scandal, that in all large cities, in common with the one from which I write, people in affluent circumstances flock thither and are courteously supplied with prescriptions (they may be unable to come to the hospital yet, and send for the *nosocomical* luminary if he made an impression). I say that in this respect a grievous injury is done to the general practitioner, and he is an exceptionally good-natured individual who, if he receives a box on the one ear willingly submits the other to similar manual concussion.

But independent of personal vain-glory on the part of directors and wealthy men, probably doubtful of a glorious inheritance in life to come, and who found such institutions that their paltry names may be lisped when an inversion of organic laws has assimilated their bones to cognate inorganic matter,—I say, again, what purpose do hospitals subserve? They subserve a very important purpose for individuals, no matter what their mental calibre and intelligence, who succeed in obtaining appointments in them—viz., the purpose of oblique advertising media, and, consequently, it would never do for these Æsculapian luminaries to treat Mrs. Bawbee in her sealskin jacket otherwise than with studied respect, a feeling of which, by the way, she entertains little for herself. I might dilate—I have done it already, and am not afraid to do it again—on the nepotism of such appointments in this great emporium of commerce and ignorance. Will anyone elect to refute my statements?

So far the purpose subserved by hospitals amounts to this—viz., the treatment of individuals who ought not to be so treated, the flattering of the vanity of weak men, and the advertising media of the hospital staff.

But one word on that important subject, the education (God help them, if that be not indeed a large economy) of young men who enter the medical profession. Well, I see no reason why the requirements for teaching should not be equally well supplied under the parochial system. This I do know, that parochial hospitals in Glasgow afford most ample means for medical study. On this subject much might be said; but as I have already encroached so much on your space, I come to the question of special dispensaries, institutions, or hospitals, by whatever name those organisations are known among men.

The objections to general hospitals apply with equal cogency to them, or *vice versâ*; and I am inclined to think that their establishment is equally justifiable. What right, I would ask, has any man, or any body of men, to monopolise a common possession, and trade upon it if custom so sanction? Charity has degraded into a trade; it is a profitable one because it commends itself to hysterical ladies and fatuous old rich blockheads. 'Tis mine, if I choose to exercise it (and, for the life of me, I can see no reason why now I should not); 'tis yours, and you exercise it profitably; and given a man's bread and butter and principle even in the one hand, and the sanction of the self-constituted heads of the profession to the doing of that which will further his ends by the giving (or trading upon, if you will) of that which he has an equal right to give or trade upon, he would be an ox indeed who would hesitate which bundle of hay to seize upon. It is all very well for Seneca to say that the very gods look down on a good man struggling against adversity, and smile. What are the gods smiling at? Smiling sympathisingly at the "good man"?—Not at all; smiling at his stupidity!

I have been watching your columns of late with my wonted attention, and I observe that, in addition to this New Dublin Eye and Ear Infirmary, you have an addition to the already numerous special institutions of the metropolis in the shape of a Hospital for Women in Chelsea. Was there ever a public want of such an institution felt? No. This, like all the rest of such institutions, creates the demand, not the demand the supply. Well, Sir, I think the time has arrived when it should be acknowledged unreservedly that an advancing "civilisation" has forced a necessity upon us, and I have urged upon some of my friends in this city that the course is open to us. If it put down the shop system I question whether an advantage may not thereby accrue. Why three-fourths of the medical men of Glasgow keep open shops, and advertise to the public patent medicines ranging through Rooke's solar elixir, Mrs. Winslow's soothing syrup, down to the mire of "Life Drops," &c. &c. It is a weighty question which is the more respectable. Yet I am an apologist for the drugging of patients to any amount, *if men cannot live otherwise*, and have been beguiled into a very *low trade*, though unquestionably a noble profession. Query: where *is it* practised as a *profession*?

I confess that it does seem a little strange that Dublin, with not half the population of Glasgow, should have *three* eye and ear dispensaries, and Glasgow but two; but Dublin, the rumour has reached me, has physicians and surgeons, no shops, I understand, and gentlemen in the profession; and if we must have either, I say give us the dispensaries.

But to condescend upon figures with respect to this city—to imitate, if not actually to quote, the genial biographer of Knox—of tall chimneys, tall piety, and tall iniquity. (Knox, by the way, was not the only man who found Glasgow uncongenial because he could spell!) According to the *Glasgow Herald* the aggregate capital held by the various charities in Glasgow is at present upwards of £1,265,000! There is an army of 10,000 paupers. A fourth of the population receive medical charity gratuitously. I have calculated that £150,000 are spent annually in charities (not including Jewish regeneration), and still, according to my friend, Dr. Fergus, 200 *people die in Glasgow per month without medical attendance*. Lovely Golgotha! Startling figures I should say! Nevertheless men must be charitable. It is christianity; it is civilised. I thank God it is not savage! *Populus vult "humbugendum," et "humbugendum" est, et erit per interminata secula æternitatis!*

And what of the management of our medical charities? *Eight* members of the Royal Infirmary staff are attached to *special institutions*, three exclusively of any other colleagues!

Given a man between the shop system, prescribing druggists, special institutions, and infirmaries, where, in Heaven's name, *can* his practice come from? Let me just add that even "respectable" druggists in Glasgow prescribe. I was called upon yesterday by a patient in humble circumstances who had a gonorrhœa for eight months, and who is certain he gave from £15 to £20 to druggists attempting to cure it; paying, as he told me, from 9*s.* to 10*s.* for two small bottles. How many respectable practitioners ever got that sum for the cure of a gonorrhœa?

I think I have made plain that there is nothing for us but the dispensary system. Let men be fought with their own weapons; let each keep up his institution as best he can. Our profession is indisputably in the throes of intestine revolution. Why halt we between two opinions? Let each one stretch forth his arms, pull down the temple with a long pull, a strong pull, and a pull altogether, as they say at sea; and let him perish or live who can, amid the universal crash of old things passed away.

I am, Sir, yours, &c.,

D. CAMPBELL BLACK.

St. Vincent-street, Glasgow, July 8th, 1872.

THE LOCAL GOVERNMENT BOARD AND SEWAGE IRRIGATION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of June 29th it is stated that "Birmingham has expended all its time and money in vain, and by this vote the House of Commons has been reduced to the level of a St. Pancras vestry." The West Ham Local Board, representing a large district adjoining the metropolis, with a population of 70,000, has met with a similar fate at the hands of the Local Government Board. With penal clauses hanging over its head, the West Ham Board has, for the last four years, gone up and down the country, seeking information on the sewage question; and, in the words of Mr. Rawlinson with reference to this case, "has made inquiry, has inspected sewage clarification and irrigation works, and has come to the conclusion that sewage

irrigation is the only known means of rendering the effluent water of sewage sanitarily unobjectionable." The West Ham Board also read in the report of Messrs. Rawlinson and Harrison, Royal Commissioners upon the pollution of the Thames and the Lea, and inspectors under the Local Government Board, that all means of dealing with sewage, excepting irrigation, were "on one ground or other objectionable." The commissioners also emphatically said that "disinfectants do not disinfect, and filter beds do not filter; both attempts have been *costly failures*." All the reports of Royal commissioners and select committees issued by Government during the last ten years, assert the same thing in the most unmistakable manner. Relying upon such evidence and information, collected at so much cost to the country, as well as upon the advice of scientific men in the employ of the Government, the West Ham Local Board determined to adopt the official recommendations, and, after much labour, were fortunate enough, they thought, to secure 747 acres of suitable land at Barking, without litigation, at £96 per acre, with the advantages of being intersected by public roads and a railway, also a Thames frontage for the removal of farm produce. Nothing more was necessary but the sanction of the Local Government Board. This sanction was refused upon the following grounds:—That tanks may be used in a populous district "without creating a nuisance." That neither the Rivers Pollution Report, nor the evidence from Croydon, Carlisle, Cheltenham, or Warwick "affords a reasonable or fair prospect to the West Ham Board to enter upon an extensive scheme of sewage irrigation." That "absolute necessity" would alone justify the West Ham Board in committing the ratepayers to the irrigation scheme.

These are general arguments, applicable everywhere, and condemnatory of sewage irrigation as a commercial failure. West Ham has now to deal with the sewage of 70,000 people in a crowded neighbourhood.

In addition to the above general grounds of refusal, the report deals with local financial circumstances, the arguments used being of the most unsatisfactory character; but apart from the local circumstances of West Ham, the substantial fact remains that irrigation has been officially condemned by the Local Government Board as a commercial failure, and the decision was quoted by Sir R. Peel in the House of Commons as an argument against the Birmingham Sewage Bill.

I am, Sir, your obedient servant,

LEWIS ANGELL, M. INST. C.E.,
Hon. Fellow, King's College, Lond.

Universities Club, July 3rd, 1872.

THE SEAMEN'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—I became house-surgeon to the Seamen's Hospital in April last. I then agreed to certain rules and regulations, for which I was to be responsible to the senior medical officer. Everything went on smoothly until the second week in June, when suddenly Mr. Kemball Cooke, the house-governor and secretary, usurped the powers held by the senior medical officer; and the following order was sent to me by the committee:—"That in the absence of the committee the house-governor alone shall be responsible for any departure from the printed instructions laid down for the guidance of the officers of this institution." Now as the last of my rules ran thus: "He shall give me one month's notice in writing previous to resigning his situation, and be subject to removal upon a like notice from the committee," I forwarded to the committee the following protest:—

"Gentlemen,—I write to protest against your order, which has been communicated to me by Mr. Leach.

"It is universally the case in all hospitals that after a general routine system has been established, suggested by the medical, and confirmed by the lay committee, it is left to the resident staff to arrange as to absence and other minor details; and then, if any neglect of duty to the patients occurs, it becomes the secretary's duty to report such to the lay committee, and for them to take measures such as they may think fit, but in no case that the secretary should interfere with their privilegers as medical officers. Already your restrictions are unnecessarily oppressive. You must recollect that medical men who have received their diplomas, and are already fitted to take a responsible position in life, are no longer schoolboys; and it is not in the nature of things that they should submit tamely to be brought back again to the reminiscences of their earliest boyhood by being obliged to ask a lay official whether they may go out or no. I have been admitted under certain rules and customs, and it now only remains for me to say, that if such an alteration as you propose be carried into effect I shall retire at the earliest opportunity. But let me warn you to take care lest by the increasing irksomeness of your rules you render this establishment wholly distasteful to the medical profession.—I am, Gentlemen, your obedient servant, "WILLIAM SWAN, M.B., *House-Surgeon*.

"P.S.—Of course, during the remainder of my stay here I shall adhere to the original rules, and consider myself responsible to the committee."

After the meeting of the committee on Friday, the 28th of June, I received the following resolution:—"That the committee having read the letter of Dr. Swan, in which he expresses his intention of ignoring the resolution passed on the 14th instant, *and of not conforming to the regulations of establishment*, his further services be dispensed with."

Now, Sir, in my protest I never stated that I did not intend to conform to the regulations; and since then, on the only two occasions on which I was absent from the hospital out of hours, I had applied to the senior medical officer as previously.

I was not called in before the committee either at the first, to give me an opportunity of assenting to the new *régime*, or retiring, nor at the meeting which dispensed with my services, so as to enable me to vindicate my conduct; but I was discharged without a hearing, or the benefit of the month's notice mentioned in the rule which I have above quoted. I may mention that my term of office, without removal, would have expired on the 6th of July where, then, was the necessity for the summary ejectment? I write to show that my dismissal was not due to any serious offence on my part, but to the irregular proceedings of Mr. Kemball Cooke, and to warn others, lest they thrust themselves into the lion's mouth.

I am, Sir, yours faithfully,

London, July 1st. WILLIAM SWAN, M.B.

MANCHESTER.

(*From our own Correspondent.*)

AT the concluding meeting of the session of the Manchester Medical Society, Mr. Stocks showed an ovarian cyst, which had become prolapsed, forming a distinct tumour outside the rectum. It was removed when in this position, and the patient made a good recovery. Dr. Little showed a specimen of impaction of a chip of iron in the sheath of the optic nerve, and a case of lead opacity of the cornea, which well illustrated the mischievous results of the abuse of lead lotions. Dr. Hardie narrated the sequel of the case of tumour in an infant which he showed at the last meeting of the Society. On proceeding to remove the tumour, he found that it had no connexion apparently with any particular structure, and required a deep dissection for its removal. It was obviously of a malignant nature. The infant progressed satisfactorily for twelve days, when bronchitis set in, and proved fatal within forty-eight hours. Dr. Hardie also remarked on the operation of excision of the breast for malignant disease, and showed two cases, one a woman who had been operated on two years ago, and the other whose breast had been removed four years ago, in whom there was no evidence at present of the return of the disease. Mr. Bradley, in the course of some interesting remarks on the treatment of hydrocele, recommended a new method of treatment, which consisted in a combined process of tapping and strapping, so that by the pressure thus exerted the risk of the formation of hæmatocele is completely done away with. Mr. Westmorland showed a cast of the mucous membrane of the bladder, which had been voided by a puerperal woman under his care. Dr. Lloyd Roberts showed the parts in a case of fibrous polypus the size of an infant's head attached to the fundus uteri. The patient, who had persistently refused all operative interference, was a woman of forty, and the mother of several

children; she died of hæmorrhage. Dr. Lloyd Roberts also showed the following instruments:—Foveaux's battery for the application of the interrupted current, whose advantages are its elegance, compactness, and non-liability to get out of order; it is obtainable of Messrs. Mottershead, of this city. A pair of forceps with serrated points, which he had found very useful in the operations for recto-vaginal and vesico-vaginal fistulæ, and for the removal of mucous and hypertrophic uterine polypi; and an improved needle-holder, which he had found useful in abdominal sections. Dr. Samelson showed a photograph of a case of tumour of the orbit, and read the notes of the case.

The session just concluded may be regarded as one of the most successful which our Society has ever had, whether we look at the numerous specimens and communications brought forward, or the interest evinced by the members in its proceedings. It is to be desired, however, that a larger number of the country members would avail themselves of its privileges. The roll of members now numbers about 150, and is the most flourishing in the Society's history. I must not omit to note how largely the Society is indebted for the success of its meetings to the energy and courtesy of its honorary secretary, Dr. Ritchie.

July 6th, 1872.

PARIS.

(From our Special Correspondent.)

DR. BROWN-SÉQUARD'S RECENT EXPERIMENTS.

A few days ago I had the pleasure of assisting at several experiments of the highest interest, which Dr. Brown-Séquard conducted at his laboratory of the Ecole Pratique. The illustrious physiologist has just returned from America, and, amongst other physiological investigations, has resumed a series of experiments on the production of emphysema of the lungs through galvanisation of the base of the brain. He also showed me some very curious facts of morbid inheritance in guinea-pigs, which are well worthy of being noted and set in comparison with similar phenomena in man. I do not wish to spoil the relation of the various facts and experiments which I witnessed and was informed of by a few hasty lines; I purpose, therefore, to devote the greater part of some future letter to Dr. Brown-Séquard's most recent researches.

I may just mention that Dr. Brown-Séquard has resigned his appointment of Professor of Experimental Physiology at the Faculty, and will shortly return to America, there to fix his scientific and professional quarters.

M. CLAUDE BERNARD'S LECTURES ON ANIMAL HEAT.

M. Claude Bernard has only quite recently terminated his series of very interesting lectures on animal heat. The last course was devoted to the physiology of heat. The one next year will take in all the pathological bearings of the question, but in his concluding lecture a few days ago M. Claude Bernard stopped to make a few general remarks on the pathological and physiological bearings of his subject as connected together. Amongst other things, he said that "health and disease were not, as formerly believed, two distinct and absolutely contradictory conditions. They were only shades of the same physiological state. Health and disease did not fight for possession of the body. The same process still continued, only it was better regulated during health than during disease. Disease did not cause the appearance of new products; thus diabetes is marked by a more abundant production of sugar, but sugar was also produced in the healthy state." "Physico-chemical manifestations," he said, "do not change in character according as they take place within or without the organism; or, again, according to the condition of health or disease. There is but one kind of calorific agent, and it always remains identical with itself, whether it be produced in a focus or in the organism. There cannot exist a physical heat and an animal heat, nor a morbid heat and a physiological heat. Morbid heat and physiological heat differ only in degree, and not in kind."

The experiments which M. Bernard has performed on the circulation of the blood are of great interest. Amongst other facts and inferences, the following may be briefly related. Circulation is accelerated or slackened according as such and such a nerve is operated upon. In one of the experiments the following facts were observed. A dog was submitted to the action of woorara. When quite motionless, respiration and circulation continuing, the extremity of one ear was cut off, and the quickness with which the drops of blood fell one after another served to note the speed of circulation. A glass tube was then introduced into the submaxillary gland so as to gather the secretion. The great sympathetic was then set bare in the neck, as also the sciatic nerve in the posterior region of the thigh. The cervical string of the sympathetic was then cut, and then the blood was seen to flow much more rapidly, the drops quickly succeeding each other. At the same time, a flow of saliva from the submaxillary gland into the tube was observed. Just then, however, on galvanising the upper end of the great sympathetic, the blood diminished, and finally ceased running, through the contraction of the small arteries of the ear, the contraction sometimes going so far as completely to obliterate the arteries. These phenomena changed as galvanisation of the sympathetic was suspended.

All the above phenomena, as shown by M. Claude Bernard, are localised modifications with which the central organ of circulation has nothing to do. This is not the case when the sciatic nerve is operated upon. In order to compare results, both sides of the animal may be experimented upon at the same time. Thus the left ear being cut off, the operations performed on the right side by galvanising the sympathetic, and suspending the galvanisation, have no influence over the flow of blood from the left ear. But when the sciatic is operated upon the flow of blood becomes more intense from both ears, whilst the same result obtains with the submaxillary glands. Thus there are reflex nervous phenomena which, through the dilatation of the vaso-motor nerves, increase the activity of the peripheric circulation, and these phenomena are produced more rapidly on exciting the sciatic nerve than on exciting the sympathetic.

M. Bernard has been led to recognise two antagonistic mechanisms which regulate the work of the capillary vessels, and indirectly that of the heart; they are the sympathetic forming a constricting mechanism, whilst the depressor nerve, and the sensitive nerves generally, suppress the constrictive effects as a consequence of their action. This double action, forming a complex mechanism which it is difficult to analyse, gives the clue to calorification, and consequently to fever and the morbid phenomena connected therewith. The whole circulatory apparatus would be thus subjected to a double spring, one of which stretches while the other does not, and health would be nothing else than perfect equilibrium between these two powers, constantly active and opposed to each other.

DEATH OF PROFESSOR DENONVILLIERS.

I have just heard of the death of Professor Denonvilliers, who had been lingering for some time with a disease of the heart. He was sixty-three. M. Denonvilliers occupied the chair of surgical operations at the Faculty, and was surgeon to La Charité, one of the inspectors of the Board of Education, Commander of the Legion of Honour, &c. He was a man of very bright abilities as a surgeon and professor, and was especially remarkable for clearness and precision, and would have rendered good and great service to the science and practice of surgery had he not been of an indolent and *far niente* disposition, which damped or rendered useless all his best inspirations and brightest gifts of intellect. The masterpiece of his professional life and labour is the "Compendium de Chirurgie," written in conjunction with his colleague, Professor Gosselin, a book remarkable for fulness and yet conciseness of information, clearness of style, and precision of method. It is in the hands of every diligent student of surgery, and on the library shelves of all the French surgeons.

SANITARY CONDITION OF PARIS.

The health of Paris is now remarkably good. Last week the deaths mentioned on the municipal registers were only 660, a figure far below the average. Small-pox is almost unheard of. There is at present an epidemic of measles. Infantile diarrhœa is beginning to be prevalent.

VACCINATION.

The authorities here are taking great pains to ensure the most extensive employment of vaccination and revaccina-

tion. At the doors of all the mairies of Paris a board has been stuck up, offering three francs premium to every poor person who will bring her child to be vaccinated. At the same time, once a week whole battalions of soldiers are brought by their commanders to the Academy of Medicine, where they all go through the process of revaccination.

CHOLERA IN THE EAST.

M. Fauvel read a very long and able report to the Academy of Medicine on Tuesday last concerning the present state of cholera in the East, which it is his business, as head inspector of the sanitary service in France, to investigate; and he concluded that, all things carefully considered, there was less risk this season of cholera spreading to the west of Europe than there was last year.

Paris, July 10th, 1872.

(*From an occasional Correspondent.*)

THE MAISON MUNICIPALE DE SANTÉ.

One of the most interesting of the Paris hospitals is undoubtedly the Maison Municipale de Santé. There is in London nothing of a similar kind, except, perhaps, the Women's Hospital, in Soho-square, and I feel certain that a short account of this hospital, and its mode of management, cannot but be acceptable to your readers.

The hospital, which is under the control of the municipal authorities, contains nearly 600 beds, and was founded in 1802 for the treatment of sick and wounded persons who, being unable to receive proper treatment at their own homes, can here, for a fixed tariff, obtain all necessary care and attention. The prices vary from twelve francs to four francs per diem. For the former charge the invalid has a room to himself and a smaller room for the accommodation of a nurse or friend. For the smaller charge he has to share a room with five others. Between the extreme charges there are intermediate ones. For eight francs one can have a small private room, for six francs one shares a room with two beds, for five francs one with three, for four francs and a half one with four, and so on.

For this fixed daily charge are provided medical and surgical advice, all appliances and medicines, food, linen, firing and baths. All kinds of cases are admitted—cases requiring operation, chronic and acute diseases of all kinds, and diseases of the skin, for the treatment of which there is a very extensive range of baths. Ladies are also admitted for their accouchements.

If the invalid requires a special nurse he has to pay an additional sum.

There are two physicians (MM. Cazalis and Besnier) and one surgeon (M. Demarquay).

The patients are allowed, at their own cost, to call in consultation any of the physicians or surgeons of the Paris hospitals.

There are "internes" always residing in the hospital to render what immediate assistance may be required, and to carry out the details of treatment, &c.; and there is a resident director at the head of the establishment. All the officers and nurses have fixed salaries and wages, and no fees are allowed to be given by the patients to the officers. There is a chapel on the establishment, and the space enclosed by and surrounding the building is tastefully laid out in gardens for the benefit of the patients.

Visitors are admitted every day from eight in the morning till nine at night, but no patient is allowed more than three visitors at a time.

Persons who are not actually living in the hospital are admitted to the bath establishment on payment of a fixed tariff. This establishment is very complete, and comprises every variety of bath that the exigencies of medicine can demand or the ingenuity of man has invented.

The general appearance of the Maison de Santé was very satisfactory, and everything seemed to be done that could enhance the well-being of the patients. The house was clean, the apartments airy and well furnished, and the whole establishment gave one an idea of comfort which is not usual in an hospital of any kind. The patients all seemed very comfortable, and not the least happy of them appeared to be M. Villemessant, the editor of the *Figaro*, who was sent to prison the other day for libelling General Trochu. The man of letters, however, has obtained a doctor's certificate which enables him to undergo his sentence in the Maison de Santé, where he contrives, by the help of good diet and other medical comforts, inclusive of cigars, to write those sparkling articles which prove so attractive to the readers of the *Figaro*. "Imprisonment" seems to be one of the many things which they manage better in France.

Obituary.

ROBERT SHIRLEY BELCHER, JUN., M.R.C.S., L.S.A.

DIED, at Burton-on-Trent, on the 22nd May, of chronic phthisis, Robert Shirley Belcher, jun., aged thirty-five. The deceased was educated at King's College, London. A diligent student, he soon began to reap some of the prizes his Alma Mater had to offer, and became a Warneford scholar. Having completed his curriculum, and qualified himself in medicine and surgery, he joined his father in practice, and threw himself heart and soul into the work of his profession for which he had fitted himself so well, and to which he became so devoted. With singular disinterestedness and energy he for several years performed and enjoyed his arduous duties. Some four years ago—shortly after two serious accidents—symptoms of incipient lung disease declared themselves. Resisting the entreaties of his friends, and doubtful of the permanent effects of change of climate, he still remained at his post, and to within the last few weeks of his short but eminently useful life continued to take an active and prominent part in medico-chirurgical practice. Of retiring disposition and of sterling integrity, he was beloved by those who knew him well, and respected by all. As a surgeon he was prompt and skilful, as a physician patient and sagacious. He had the art of obtaining not only the confidence but the affection of his patients, and his early death is a subject of grief and sympathy to a very large circle of his friends and neighbours.

DR. JAMES CORNWALL.

THIS well-known Edinburgh practitioner died suddenly at his residence, 6, West Circus, the 18th of May. His professional studies were pursued in the city where he ultimately practised. In 1835 he became licentiate of the Royal College of Surgeons, and in the same year he graduated as Doctor of Medicine in the University. He was much esteemed by his professional brethren, and in considerable request by a respectable *clientèle* of patients. His duties as a practitioner did not prevent him from taking an active interest in the scientific bodies connected with the healing art, being a member of the Medico-Chirurgical, Harveian, and Obstetrical Societies. For some time he acted as medical officer to the Minto House Hospital and Dispensary. His death will be mourned by a large number of friends at home and abroad.

THOMAS EDWARD STAINTHORPE, M.R.C.S., &c.

WE regret to have to announce the death, at the early age of twenty-six, of Mr. T. E. Stainthorpe, of Hexham. Mr. Stainthorpe distinguished himself while a student at the Middlesex Hospital, and after settling in Hexham, in partnership with his father, his attention to his duties and painstaking care of his patients inspired them with unlimited confidence in his ability and assiduity. As a man he possessed a native reserve in his intercourse with strangers, which, however, soon wore off; but this trait in his character, if not a virtue, was certainly not a fault. His bearing to those he knew was open, warm, and generous; pleasant as a companion, amiable as an associate, firm and sincere as a friend, while his unpretentious, unassuming demeanour endeared him to all, and impressed even the most casual acquaintance. The loss of such a man, therefore, is not only a source of private affliction, but of public grief, and the early death of Thomas Edward Stainthorpe will be long and sincerely lamented by all who had the privilege of his acquaintance, and the longest and most deeply deplored by those who knew him best and could duly estimate his worth.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 4th inst.:—

Ayling, Arthur Henry Williams, Great Portland-street.
Bracey, Herbert Richard, Birmingham.
Fairbank, William, Highbury-hill.
Maybury, Aurelius Victor, Frimley, Surrey.
Maclean, Allan, Caistor, Lincolnshire.
Payne, George Spoke, St. Bartholomew's Hospital.
Williams, Benjamin Harvey, Haverfordwest.

On the same day the following gentleman passed his First Professional Examination:—

Scott, Edward, St. Bartholomew's Hospital.

THE COLLEGE OF SURGEONS.—The annual meeting of the Council of the College of Surgeons was held on Thursday last, the 11th inst., when the ordinary business was transacted. Mr. Hancock was elected President, Messrs. Curling and Le Gros Clark were elected Vice-Presidents, and the existing professors were re-elected.

LAST year 24,163,644 gallons of British spirits were charged with duty for consumption in the United Kingdom.

THE German Emperor has presented his staff at Berlin with the famous military library of Metz, consisting of 40,000 volumes, the result of several centuries' compilation.

THE Kent Medical Benevolent Society held its eighty-fifth annual meeting at Maidstone, on the 10th inst, Henry Joy, Esq., in the chair, supported by Dr. Carr (one of the trustees), Dr. Monckton, Dr. John N. Miller, Mr. Wood, Mr. Hoar, and others. To eight annuitants the sum of £370 was granted, the smallest being £30 and the largest £100. In the previous year, £270 was granted to six annuitants. Seven new members were elected. The Society is altogether in a very satisfactory condition; it has £8000 invested. After transacting the usual business, and arranging that the next annual meeting shall be held at Canterbury, in July, 1873, the members dined together at the Royal Star Hotel. It may interest members of the profession residing in Kent to know that this excellent Society may be joined by all qualified medical men residing in the county, on being recommended by two actual members, and the payment of £1 1s. annually. Apart from the fact that it is at once both a benefit society and an insurance on the life of its members, it has still a wider claim on the sympathy of the profession as a philanthropic association specially designed for the relief of the widow and orphan.

Medical Appointments.

ANDERSON, R. M., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant Medical Officer at Hardoak Lodge Retreat, Ashton, Newton-le-Willows, vice W. F. M'Lean, M.B., C.M., resigned.

ALEXANDER, W., M.D., has been appointed Assistant Medical Officer to the Brownlow-hill Workhouse, Liverpool, vice R. Y. V. Packman, M.R.C.S.E., resigned.

COVERNTON, C. J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Llanbister District of the Knighton Union, Radnorshire, vice J. M. Jones, M.R.C.S.E., resigned.

DOBSON, N. C., F.R.C.S.E., Surgeon to the Bristol General Hospital, has been appointed Lecturer on Anatomy in the Bristol Medical School, vice J. P. Lansdown, M.R.C.S.E., resigned.

DOWN, H. W., M.D., L.R.C.P., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the South Hornsey (late Stoke Newington) District of the Edmonton Union, vice Frederic Wm. A. Rawlins, M.D., M.R.C.S.E., resigned.

DUKE, A. A., M.D., L.R.C.S.Ed., has been appointed Officer to the North Surrey District School at Anerley, vice Frederic E. Wilkinson, M.D., L.R.C.P.Ed., resigned.

ELLIOTT, C., M.B., L.R.C.S.I., has been appointed Medical Officer to the Dingle-mount Workhouse, Liverpool, vice James H. Finegan, M.D., M.R.C.S.E., resigned.

FRENCH, E. T., L.R.C.S.I., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Glasson Dispensary District of the Athlone Union, Co. Westmeath, vice P. Longworth, M.D., L.R.C.S.I., resigned.

GOODENOUGH, W. H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Parochial Medical Officer for Flisk, Fifeshire, and interim Medical Officer and Public Vaccinator for the Parish of Newburgh, vice R. Peters, L.R.C.S.Ed., deceased.

GRIFFITH, R. G., M.R.C.S.E., has been elected House-Surgeon to the Carnarvonshire and Anglesey Infirmary, Bangor.

HAIGH, S., M.R.C.S.E., has been appointed Medical Officer for District No. 4 of the Chipping Norton Union.

HAMILTON, Mr. A., has been appointed Medical Officer for the West Drayton District of the Uxbridge Union, vice D. Corbet, M.R.C.S.E., resigned.

HIME, T. W., M.B., L.R.C.S.Ed., L.M., has been appointed Resident Physician to St. Ann's Hydropathic Establishment, Co. Cork.

JONES, M., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Aberystwith Union Workhouse, vice Roberts, resigned.

LATHAM, W. H., M.R.C.S.E., has been appointed House-Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, Manchester.

LOWNDES, F. W., M.R.C.S.E., has been appointed Medical Officer for District No. 12 of the Parish of Liverpool, vice J. H. Finegan, M.D., M.R.C.S.E., resigned.

M'SWEENEY, M. O'C., L.K.Q.C.P.I., L.R.C.S.I., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Oulart Dispensary District of the Enniscorthy Union, and Medical Officer to the Fever Infirmary, vice L. J. Ryan, M.D., deceased.

MOIR, J., M.R.C.S.E., has been appointed Medical Officer to the Robert Burns Friendly Society, Aberdeen, vice J. G. Smith, M.D., M.R.C.S.E., deceased.

MORRIS, J. H., M.R.C.S.E., has been appointed a District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, Manchester, vice Latham, appointed House-Surgeon.

PARKE, Dr. W. J., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ely Dispensary District of the Enniskillen Union, Co. Fermanagh, vice Wilkin, resigned.

PIKE, W. R., M.R.C.S.E., has been appointed a Medical Officer for Out-patients of the Royal Portsmouth, Portsea, and Gosport Hospital.

PROVIS, W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Workhouse of the Mere Union, Wilts, vice C. Ramsey, M.R.C.S.E., resigned.

SMITH, A., M.D., F.K.Q.C.P.I., has been appointed Treasurer to the King and Queen's College of Physicians in Ireland, vice H. L. Dwyer, M.D., F.K.Q.C.P.I., deceased.

SPENCER, W. H., M.A., M.B. (Assistant-Physician, Bristol Royal Infirmary), has been appointed Lecturer on Physiology at the Bristol Medical School.

STOREY, J. A., L.R.C.S.I., has been appointed House-Surgeon, *pro tem.*, to the North Riding Infirmary, Middlesborough-on-Tees, vice A. E. Lloyd, L.R.C.P.Ed., M.R.C.S.E., resigned.

TANNER, R. C., M.R.C.S.E., has been appointed Medical Officer for District No. 4 of the Upton-on-Severn Union, vice W. T. White, F.R.C.S.E., resigned.

WOODS, R. A. H., M.R.C.S.E., has been appointed Medical Officer for District No. 6 of the Parish of Liverpool, vice Lowndes, transferred to District No. 12.

WRIGHT, J. F., L.S.A.L., has been appointed House-Surgeon to the Teignmouth, Dawlish, and Newton Infirmary, vice S. S. Noakes, L.R.C.P.I., M.R.C.S.E., resigned.

WYER, G., M.D., has been appointed Hon. Secretary to the Apothecaries' Benevolent Fund, Ireland, vice J. A. Dirham, M.R.C.S.E., deceased.

Births, Marriages, and Deaths.

BIRTHS.

ANGUS.—On the 5th inst., at Wentworth-place, Newcastle-upon-Tyne, the wife of James Acworth Angus, M.R.C.S.E., of a son.

GIRAUD.—On the 26th of May, at the Sanitarium, Poorundhur, Bombay, the wife of Brig Thomas Giraud, M.D., Army Medical Staff in medical charge, of a daughter.

HEYGATE.—On the 27th ult., at Towcester, Northamptonshire, the wife of Wm. H. Heygate, Surgeon, of a daughter.

RATTRAY.—On the 6th inst., at Brighton-place, Portobello, near Edinburgh, the wife of Andrew M. T. Rattray, M.D., of a daughter.

RUSSELL.—On the 8th inst., at Hallfield-road, Bradford, Yorkshire, the wife of the Rev. A. G. Russell, M.D., of a daughter.

SEALY.—On the 27th ult., at Oak-hill House, Weybridge, the wife of George J. Sealy, M.D., of a daughter.

SMITH.—On the 9th inst., at Pershore, the wife of S. W. Smith, M.D., of a son.

MARRIAGES.

EWART—KANE.—On the 4th inst., at St. Mary's, Islington, John Henry Ewart, L.R.C.P.L., M.R.C.S.E., of Cheetham-hill, Manchester, to Emily Matilda Christine, second daughter of Matthew Kane, M.D., Deputy Inspector-General of Hospitals H.M.'s Madras Army (retired list), of Dinan, France.—No Cards.

TAYLER—CLARK.—On the 3rd inst., at the Parish Church, Trowbridge, Geo. Christopher Tayler, M.D., of Trowbridge, to Sarah Elizabeth, elder daughter of Perkins Clark, Esq., of Wyke House, Staverton.

TAYLOR—CURTIS.—On the 4th inst., at the Parish Church, Glyn Ceiriog, near Llangollen, Jas. Taylor, L.R.C.P.L., of Chester, to Annie, daughter of the late Robert Curtis, Esq., of London.

WILLS—HOLMES.—On the 3rd inst., at St. Peter's Church, Dublin, C. S. Wills, Staff Assistant-Surgeon, to Louisa Lucy, second daughter of the late Rev. James P. Holmes, Rector of Gallen, King's County.

DEATHS.

ALLAN.—On the 6th inst., at Grafton-terrace, North John-street, Glasgow, J. Allan, M.B., L.R.C.S.Ed., L.M.

BRADLEY.—On the 3rd inst., J. K. Bradley, L.K.Q.C.P.I., L.R.C.S.I., of Kilmoganny, Co. Kilkenny, aged 27.

COULTER.—On the 3rd inst., at Penally, near Tenby, South Wales, of pneumonia, John B. E. Coulter, M.B., L.R.C.S.E., Staff Assistant-Surgeon Army Medical Department, aged 31.

GODDARD.—On the 30th ult., at Broderick-road, Wandsworth-common, Mr. H. R. Goddard, Student of St. Bartholomew's Hospital, aged 21.

GYLBY.—On the 3rd inst., W. T. Gylby, M.R.C.S.E., of East Retford, aged 82.

ISHERWOOD.—On the 2nd inst., F. W. Isherwood, M.D., of Hayes, Middlesex, aged 36.

Medical Diary of the Week.

Monday, July 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, July 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, July 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 20.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

SINGULAR FATALITY.

A LAMENTABLE and singular occurrence is reported from the neighbourhood of Bristol. Two men, named George Burges and William Iles, were engaged repairing a rosin-still at Messrs. Butler and Co.'s tar and rosin distilleries, Crewe's Hole. The men had been at work several days, and on Friday they went to work as usual; but as neither of them came home to breakfast, search was made for them, and their dead bodies were found inside the still. The circumstances attending their death, as reported at the inquest, were rather peculiar. The still stood in a shed roofed with corrugated iron. At the time the men were working in the still there was an open man-hole at the top, and a round hole at the bottom four inches and a half in diameter, used for drawing off the dross, the only other aperture being the pipe through which the vapour from the contents ascends for condensation. The still was last used about a week before the deceased began to work in it, and it was thoroughly cleansed before they entered. When the rosin is in process of distillation, it gives off a suffocating vapour sufficient to destroy life; but the still may be entered with safety three days after its contents have been drawn off. How the death of the men was caused was thus a mystery until it was explained by Mr. Saunders, surgeon, who stated that he had tested the atmosphere in the shed and still. At the level of the man-hole the temperature was 103° Fahr., inside the still it was 84°, and at the level of the bottom of the shed it was only 78°. That, in his opinion, afforded the explanation of the death of the two men. The air outside the top of the still was very light; that on the ground, being very much colder, became fixed; while that in the still was of medium weight. The consequence was that the air in the still did not rise through the man-hole at the top because it was heavier than the gas above, and would not descend through the hole at the bottom because it was lighter than the air beneath it, and the natural interchange that takes place between gases was not sufficient to support life. The deceased were thus suffocated. A verdict of "Accidental suffocation" was returned.

THE HÔTEL DIEU.

VISITORS to the oldest of all the Parisian hospitals will be glad to hear that the new buildings, which were approaching completion when the war broke out, will be finished under the auspices of the Conseil Municipal without delay. Founded in the fourth century by St. Landry, Bishop of Paris, it was during the eighteenth partially destroyed by fire on two occasions, on the second of which many patients lost their lives. The hospital is to contain 826 beds. Paris contains twelve other such institutions—the Charité, founded by four monks, who accompanied Marie de Medicis from Florence, and containing 474 beds; the Necker, established by the great Finance Minister of that name; and the St. Louis, built by Henri IV. after the plague. The latter was especially designed for contagious diseases, and was designated after the monarch, who died a victim to the plague in the East. A fifth is the Beaujon, named after the Fermier-Général, who was almost the last of these well-paid officials; and the sixth is the Pitié, founded by Louis XIII. in 1632. The remaining hospitals are the Cochin, the Midi, the Lourcine, the Reboisière, the Saint Antoine, the Sainte Eugénie, and the Clinique.

Messrs. Clark and Brigham's communication shall appear next week.

MEDICAL ETHICS.

To the Editor of THE LANCET.

SIR,—Under the above heading a letter appears in your impression of to-day from "H. R. L.," in which he deprecates the plan of appealing to the profession through your columns for judgment on those medical men who have treated their brethren with discourtesy. Now, although we must all agree with your correspondent in feeling that the necessity for such appeals is extremely unpleasant and degrading to the profession, yet I think it cannot be generally allowed that the exposure of such unprofessional conduct is either without utility or interest; for although he advises in all such cases that the dirty linen shall be washed at home, yet it must be remembered that, as a rule, it is not possible to settle these differences without the intervention of some impartial arbitrator. It is not the washing of the dirty linen that is degrading to the profession, but the fact of there being dirty linen to wash.

With regard to the statement that the publication of the evil conduct of the delinquents does not act as a deterrent to all others, the same may be said of all punishments for other civil and moral crimes; but still I suppose that even "H. R. L." would not think it wise on this account to abolish all punishments for criminal offences.

The only remedy those who have been badly treated by their medical neighbours have is to appeal to their other brethren, so that those who have acted wrongly may be shunned by those who still have a belief in the truth of the golden principle of doing to others as we would be done unto.

A very glaring case of not only want of courtesy, but even of common decency of behaviour, is recorded in another column of your "Notes and Comments" of to-day, in which the presence of "L.M.," a young practitioner, who is in attendance upon a lady far advanced in labour, is totally ignored by another and older medical man, who arrived an hour and a half after "L.M." Now, Sir, surely in such a case as this it is well that the conduct of Mr. B. (I wish his name had been given) should be published, that his other neighbours may know what treatment to expect at his hands should they unfortunately be called to a case in which he is in any way interested.

May I say, in concluding this already too long letter, that in writing I have not been actuated by personal feeling; for up to the present time I have never met with anything but the greatest kindness and courtesy from my older medical brethren; but at the same time cases are frequently occurring of which I have cognisance of the most gross violation of etiquette and honour.

I am, Sir, yours obediently,
July 6th, 1872. A YOUNG L.R.C.P.I.

To the Editor of THE LANCET.

SIR,—Since Mr. Campbell Macaulay has so positively denied (!) ever having treated me uncivilly, or ever having behaved to me and to my patients unprofessionally, I shall deem it proper to treat this and all others of his communications (whether through the medium of your journal or otherwise) with the pure contempt and disdain they deserve. I have only to add, in justification of my conduct to him personally, that the treatment I have received from him ever since he has been in this place has alone called it forth.

Yours obediently,
Cannock, July 9th, 1872. MOSES TAYLOR.

A Student.—1. Bentley and Redwood's Elements of Materia Medica.—2. Gray's Anatomy by Holmes. Both works are published by Messrs. Longman.

Mr. H. E. Bell's paper and blocks have been received.

A CASE OF ALCOHOLIC POISONING IN A CHILD AGED FOUR YEARS; RECOVERY.

To the Editor of THE LANCET.

SIR,—While recently taking charge of a friend's practice in the country, I was sent for at nine o'clock one morning to attend the following case.

I was told that the patient in his mother's absence had helped himself to some brandy, and he must have drunk, I imagine, not less than two or perhaps three ounces. He was a fair, delicate-looking boy, aged four; respiration was hardly visible; the pupils widely dilated, and he was lying quite insensible. I immediately gave him some mustard and warm water, after which he vomited slightly. This roused him a little, and he recognised his mother. He then relapsed into his former drowsy state, and, with this exception, was altogether insensible for more than three hours. At 11 A.M. the breathing was more regular; pupils alternately contracting and dilating; state of stupor the same. At 2 P.M. he was better, and the effects of the brandy were gradually passing off. By the evening he was himself again; the bowels had not acted, but he had passed a fair amount of urine, which was loaded with lithates. Two days after this the pupils were normal, and the conjunctivæ were slightly jaundiced, otherwise he appeared none the worse for his intoxication, and I have since heard that he has quite recovered.

Yours truly,
F. O. LOVELL, M.R.C.S. Eng., &c.
Alexandra-road, St. John's-wood, July, 1872.

THE TREATMENT OF MALARIOUS FEVER BY HYPODERMIC INJECTION OF QUININE.

A LATE number of the *Indian Medical Gazette* contains an abstract of the results of this method of treatment in 100 cases of fever of the intermittent and remittent type. 68 per cent. of the cases are stated to have been cured. Ulcerations at the point of injection occurred in 16 cases. The subject of the hypodermic injection of quinine was referred last year to Prof. Maclean, and his report thereon has been published officially in India. Dr. Maclean states that among the invalids in the medical division at Netley at the time of his report, he found 4 on whom this operation had been performed, and in 3 of the number troublesome ulceration had resulted, owing in all probability to the fact that the solution of the quinine had been effected by the aid of a mineral acid. It was necessary, therefore, that some solution of quinine devoid of irritating properties should be employed for subcutaneous injection. With this end in view, the so-called neutral sulphate of the alkaloid was used, which is, in fact, not neutral, for it gives a decided reaction with litmus paper. However, it appears to have answered the purpose very well. With a little care it is quite possible to inject six grains of the salt dissolved in twelve minims of water, without the aid of any acid. The proceeding is very simple. Three or six grains of the neutral sulphate are placed in a watch-glass previously warmed; to this twelve minims of distilled water are added, and a moderate degree of heat applied with a spirit-lamp for a second or two. The syringe, previously warmed by placing it in water at a temperature of about 130° Fahr., is then filled, and the operation completed in the usual way. Warming the syringe is essential. If this is neglected, immediate deposition of crystals follows, and the injection becomes impossible. The ordinary hypodermic syringe used for morphia injections is not thoroughly adapted for this purpose, and it is well to have a separate syringe of larger size and with a freer aperture for injecting quinine. A weak solution of carbolic acid should be used to wash the perforated needle each time after its being employed.

Mr. A. B. MacDowall.—If our correspondent will refer to THE LANCET for May 28th, 1870, he will see a full description of the apparatus mentioned.

DR. MACPHERSON ON CHOLERA.

To the Editor of THE LANCET.

SIR,—I have to thank you for the notice in your issue of the 6th inst. of my work on the History of Cholera, and at the same time to crave space for a few lines in reply to some of its statements.

Disappointing though it may be to one who reads most of the cholera literature, foreign and domestic, to be informed that his knowledge of the present state of the etiology of the disease is insufficient and imperfect, yet on a matter of opinion like this I can only bow to the judgment of the reviewer, remarking that an exposition of the more modern theories of the disease was scarcely to be looked for in annals only coming down to the year 1817.

When, however, it is affirmed that the book is considerably marred by the aforesaid ignorance, I have to observe that the assertion is not supported by any reference to the annals themselves, but merely to the preface and to a single note, which form the smallest and least important portion of the work.

The reviewer doubts whether the history of cholera in the past is capable of application to present circumstances. Such application should, no doubt, be made warily, and I appeal to any reader of the annals whether I have not maintained the utmost caution in this respect. I have endeavoured as far as possible to present facts, from which anyone may draw his own inferences; but if it be incapable of application, I do not know that there is any use in writing the history of disease at all.

The reviewer entertains doubts as to what the disease named cholera by the older authors was. If he will read a few of their original accounts (or even look at the extracts given in my book), he may readily satisfy himself that they described, as I have said, the protean disease of varying intensity known as cholera nostras; and, further, that from the date of their reaching India round the Cape, Europeans gave an account of what they considered to be a malignant form of that disease.

Like many others, I have hesitated to pronounce in what the difference between ordinary and malignant cholera consists, although I have endeavoured to indicate some of the points of agreement and points of difference of the two in the appendix to my work.

I am, Sir, yours, &c.,

July 9th, 1872. JOHN MACPHERSON, M.D.

Mr. John Bradbury, (Cheltenham.)—We omitted to state, in replying to our correspondent last week, that the apparatus may be obtained of Messrs. Fraser, Brothers, Commercial-road.

THE communication of *Mr. Henry Brietzcke* (Parkhurst, Isle of Wight) shall receive attention.

TRIPLETS.

To the Editor of THE LANCET.

SIR,—During a period of ten years, out of 1145 deliveries here, triplet births have only occurred twice. The first, a girl and two boys, the latter surviving. The second instance took place to-day. A woman (not a primipara), aged twenty-two, and who considered herself five months pregnant, gave birth in easy labours—first to a girl at 7.50 A.M., head presentation; next, at 9 o'clock, a boy, breech presentation, two cords, two membranes, one placenta; next, at 9.10, a boy, head presentation, separate cord and placenta. The children, well formed, lived a short time. Each weighed about 1 lb. 7 oz.; the girl was 12, the boys 13 inches long. The large double placenta, membranes, and cord, weighed 1 lb. 7 oz.; the single one weighed 9 oz.; the length of the cord 12 inches. No peculiar history. The patient states that she suffered during pregnancy from uterine hæmorrhage, and that at quickening at four months the membranes ruptured.

I am, Sir, your obedient servant,

FRANCIS R. HOGG, M.D.

Military Female Hospital, Woolwich, June 30th, 1872.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.

FROM a Report made by Dr. Robertson at the meeting of the Committee of Management of this Charity for the half-year ending June 30th, we learn that 629 patients have been admitted to the hospital, or 45 more patients than during the corresponding period of the previous year, 1871. Of the total number, 414 were discharged as having been beneficially treated.

Mr. H. F. Coles had better consult some respectable practitioner in his own neighbourhood.

HOSPITAL ELECTIONS.

To the Editor of THE LANCET.

SIR,—In reference to your leading article in to-day's LANCET on the approaching election at the Manchester Royal Infirmary, I beg leave to enclose for your inspection a copy of the paper we issued to the Governors of this hospital (about 900 in number) at the last election for a medical officer. You will see that we used a form almost identical with that you now recommend, and for your satisfaction I have pleasure in stating that it worked exceedingly well. Your obedient servant,

C. LOWTHER KEMP, Secretary.

Royal Hospital for Diseases of the Chest, City-road, June 22nd, 1872.

Mr. R. D. Logg, (Euston-road.)—We regret that our engagements prevent compliance with our correspondent's request; but any communication with which he may favour us shall have our best attention.

C. will find that we have devoted an article to the subject of which his letter treats.

FOREIGN BODY IN THE LEFT BRONCHUS.

To the Editor of THE LANCET.

SIR,—As the following case seems to me to possess some points of interest, I have thought that perhaps you may think it worthy of publication.

E. S——, aged twenty-two, was admitted to the Holborn Union Infirmary on the 17th May last, suffering from constant worrying cough, dyspnœa, profuse perspiration, loss of appetite, and insomnia. She was very pale, and there was subclavicular flattening, with dulness on percussion of left side. She said that some time previously she had swallowed a peach-stone (a fortnight before her admission, as I afterwards ascertained); but no importance was attached to this circumstance, because she said that the accident caused her no inconvenience at the time of its occurrence, and because her account of her health previously to this was contradictory. She neither felt anything moving up and down the trachea while coughing, nor could anything of the kind be detected by auscultation. Having access to the patients in the infirmary through the courtesy of the medical officer, I was struck by a dissimilarity which I could not well define, except in one particular—total absence of expectoration—between her symptoms and those of a number of phthisical patients in the same wards; and as she was rapidly sinking now, and especially as she declared two or three days before her death, which occurred on the 29th ultimo, that she tasted the stone when she coughed, I determined to make a post-mortem examination if possible, which I did on the 2nd instant by permission of her friends. Upon opening the chest, I found the left lung totally disorganised, and closely resembling a collection of mashed green peas. I examined the larynx, trachea, and right bronchus, but could discover nothing until, having slit up the left bronchus as far as the lung, I found a plum-stone firmly fixed in the extreme end of the tube, quite close to the lung, and so tightly that one's only consolation is that all operations for the removal of the offending body would most likely have proved unavailing. The upper end of the stone was broken off or absorbed, exposing the kernel, which might, as I think, account for her tasting the stone. The right lung was quite healthy.

I am, Sir, yours obediently,

Barnard's-inn, July 9th, 1872. F. A. OWGAN.

Henley-on-Thames.—We can; but it is much to be wished that members of the profession would not do so.

Subscriber.—The qualification mentioned does not confer on its possessor the title specified.

"MAD LITERATURE."

To the Editor of THE LANCET.

SIR,—Referring to the notice in your columns last week of the little journal, *Loose Leaves*, started by Dr. Hyslop, proprietor of the Church Stretton Lunatic Asylum, "for the purpose of diverting the attention of his patients from unhealthy thoughts and ways," some of your readers who take an interest in the welfare of the insane will, doubtless, be glad to know where they can obtain a copy of this literary curiosity—a curiosity insomuch that we believe it is set in type and almost entirely written by past or present inmates of the asylum. Of course the first number is hardly representative; but it is sufficient to give one an idea of what can be done if cultivated. There is no desire to make a profit of the journal, and we shall be happy to forward it, post free, to any of your readers on receipt of two postage stamps.—Your obedient servants,

BAILLIÈRE, TINDALL, AND COX, Publishers of *Loose Leaves*.

20, King William-street, Strand, July, 1872.

Dr. Edwin Griffiths.—The communication shall receive attention next week. We direct our correspondent's notice to an article on the subject in our present number.

FEES TO MEDICAL WITNESSES.

To the Editor of THE LANCET.

SIR,—At a time when the paucity of medical fees is a matter of comment, I beg to inquire whether it is fair that a surgeon, after giving evidence at a Police Court within two miles of his residence (the fee for which is 10s. 6d.), should be subject to the inconvenience, not to mention the loss of time, of having to present himself at Whitehall to obtain his fee, and whether this journey to Whitehall should not be considered as a medical presence, and additionally charged as such.—Yours, &c.,

A HOUSE-SURGEON AT A METROPOLITAN HOSPITAL.

London, June 26th, 1872.

Mr. John Anderson, (Cleator Moor.)—The hospital tent invented by Mr. J. Netten Radcliffe would probably answer our correspondent's purposes. (See THE LANCET of Sept. 2nd, 1871.) Tents answer very well indeed during this season. Our correspondent must remember the inflammable nature of the material, and take every precaution against fire. If tents are used in the cold season, they must be heated from without.

TREATMENT OF MEDICAL MEN BY EACH OTHER.

To the Editor of THE LANCET.

SIR,—I fear the complaint of "L.M." might be iterated by many a junior. It seems an article in the creed of many medical men of position that that position is best maintained by the systematic snubbing of the occupants of the lower rungs of the professional ladder.

Some years ago a wealthy patient of one of our local leaders was in labour during the said leader's absence from town. Declining to accept the services of the assistant, she sent for me, her husband expressly stating that he did not want me simply to fill a gap for their convenience, but to take entire charge of the case. This I declined to do, and attended on behalf of the doctor engaged. On that gentleman's return on the following day, he called at the house of the patient, and was informed of how matters stood; but he stuck to the case, contenting himself with sending his servant to me with a verbal message that, as he had returned, I was no longer required.

Another leading practitionor, having been called in in consultation with me, visited the case, *sub sponte*, twice or thrice daily till the patient recovered.

Our medical officer of health acts gratuitously in an adjoining board of health district, thereby preventing the appointment at a salary of the only eligible man for the post, who is a new-comer.

If this be the method of upholding professional dignity adopted by our chiefs, no marvel that there is so little of the article to uphold. I know not one of the juniors here who would so act by one of his fellows.

Your obedient servant,

July 8th, 1872. TENAX HONORIS.

Mr. W. Rendle.—Kesteven's Domestic Medicine, or a series of papers on Domestic Medicine and Surgery in "Cassell's Household Guide," would be suitable.

WATER IN THE EAST.

To the Editor of THE LANCET.

SIR,—Will you allow me to give you a description of a waterbutt in Bermondsey, in that part called Jacob's Island, described by Mr. Dickens in "Oliver Twist."

Now, at No. 2, Jacob-street, there is a waterbutt surrounded by three waterclosets, said waterbutt expected to supply four houses containing forty persons; the yard in which said waterbutt and waterclosets are placed is 12 feet square. Now I understand the scene on this 12 feet square is rather lively at times. There is an unwritten law amongst the joint owners of this butt that no family shall take more than two pailfuls a day, to do which they must be up early when the water comes on (if it should). Like all laws, this is sometimes broken, leading to quarrels, and perhaps the breaking of something else, so that some of the more weakly ones do not get their two pailfuls. It is not within the memory of any of the present owners to have seen the butt full of water. A fifth house, made famous by Mr. Dickens, and known as Sykes's house, has nothing to preserve water in if any comes on; but the tenants, seventeen in number, borrow, beg, or otherwise obtain some from my old friend, the butt at No. 2, so that he supplies in all fifty-seven persons. Some of the old inhabitants sigh for the good old times when they could take water from the filthy ditch, which served as a sewer, fill a butt, and put a lump of lime and alum into it, and let it stand for twelve hours to clear. I will not trouble you with the shifts some are put to. As for myself I have to look out sharp and see I get enough to make up the mixtures. Some houses in Bermondsey seem much favoured, especially if they are near a tan-yard, or a vestryman should live in the same row of houses.

I am, Sir, yours truly,

C. W. PRIDMORE, L.S.A. Lond.

Hickman's-folly, Dockhead, Bermondsey, June 25th, 1872.

UNUSUAL CONSEQUENCES OF A SMALL DOSE OF CHLORAL (LIEBREICH'S), AS NARRATED BY TWO PATIENTS AND THEIR FRIENDS.

To the Editor of THE LANCET.

SIR,—The accompanying notes upon chloral used in two cases are at your service if you think them of sufficient interest.

CASE 1.—A middle-aged, tall man, recently an attendant at a lunatic asylum, had a boil on the buttock. On the 17th April I lanced it, and at bed-time the man took part (containing nine grains) of a chloral draught. Shortly he became "stone-cold," his teeth were "fixed," and he stared wildly about. A cold perspiration flowed from him, wetting his pillow and sheets. Clothes in abundance were put on the bed, a fire was lit, and he took warm brandy-and-water; he then began to "feel circulation." The next morning when I saw him he looked pale and anxious.

CASE 2.—An agricultural labourer's wife, aged sixty-eight, with black hair, and a goitre affecting middle of neck, suffered from tumultuous and irregular action of heart and from pyrosis. She could get little or no rest at night. On the 17th May she took seven grains and a half of chloral at 9.30 P.M. At 10 she was asleep, and slept for two hours. Then she awoke with a scream, jumped out of bed, and sat on the edge of it, semi-conscious. She recovered in five minutes, and was got back to bed, where she lay quietly for an hour, and then fell asleep again. In two hours more she awoke with much epigastric pain.

Yours obediently,

Caterham Valley, June 27th, 1872. EDENEZER DIVER.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—I beg to suggest that copious bloodletting, followed by transfusion of healthy blood, would probably be beneficial in this and one or two other diseases. Until I know that this plan of treatment has had a fair trial, and has failed, I shall continue to believe that I have discovered how to cure hydrophobia.

Your obedient servant,

Edinburgh, June 29th, 1872. AN ASSISTANT.

*** All we can say is that this is an easy method of acquiring a title to be considered a discoverer.—ED. L.

Alpha.—We do not know of any application capable of doing what our correspondent desires; but he had better consult a respectable medical man in his own neighbourhood.

Mr. R. T. Daniell is thanked for his communication, which he will see is inserted and commented on.

A MEDICAL DIRECTORY FOR ENGLAND.

To the Editor of THE LANCET.

SIR,—A new Medical Directory for England, on the plan proposed by "Fair Play" in your issue of the 22nd ult., would, I feel sure, prove acceptable not only to foreign graduates, but to many members of the profession, secretaries of societies, &c., who desire a less bulky and (*qua* titles) more complete book of reference than that now published by Messrs. Churchill. I would suggest that it contain a single continuous alphabetical list of all legally qualified practitioners, with their residences (whether in town or country); that their legal qualifications be printed in distinctive type; and that other titles indicative of scientific or literary distinction, such as non-registerable degrees in Medicine, degrees in Arts and in Science, membership of learned societies, &c., follow subsequently, the paragraph concluding with a list of public appointments actually held, and of contributions during the past year to medical literature. This plan would, I think, be satisfactory to the majority of the profession, and would ensure a compact book containing all needful information as to the status of each practitioner. If it be found necessary more vigilantly to guard against the admission of *bona* foreign degrees (which however, it is to be hoped, are not much "desiderated" by *legally qualified* practitioners), it would be easy to exclude all mention of foreign universities and degrees not recognised by the Medical Council for the purposes of registration in the case of foreign and colonial graduates practising before 1858.

I am, Sir, yours obediently,

A REGISTERED PRACTITIONER AND FORRIGN GRADUATE.

July, 1872.

Beta.—The right of one professional man to sue another must depend on the circumstances of the case.

Mr. Walter Whitehead is thanked for his obliging communication.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. T. Holmes; Mr. Streatfeild; Dr. Sedgwick; Dr. J. Macpherson; Mr. Thomas, Wigan; Dr. Rattray, Portobello; Mr. Blyth, Worcester; Mr. Walton, Lopham; Rev. W. H. Rothery, Manchester; Mr. Ougan; Mr. Brand; Mr. Keevil, Bournemouth; Mr. Stevenson, Waltham; Mr. E. Evans, Carrick-on-Suir; Dr. Cleaver, Melbourne; Mr. Blackman, Thurso; Mr. Burder, Rochdale; Messrs. Baillière, Tindall, and Cox; Dr. Spencer, Clifton; Dr. Dickson, Buxton; Mr. H. Isherwood; Mr. W. Alleyne; Dr. M. Marioni, Barcelona; Mr. N. Dobson, Clifton; Mr. Lloyd; Mr. Lowndes, Liverpool; Mr. Fenn, Fletching; Mr. J. W. Hayward, Liverpool; Rev. A. G. Russell, Bradford; Mr. Robinson, Derby; Mr. Miller; Mr. Coltman, Glasgow; Mr. Paterson, Streatham; Mr. B. Price, Lutterworth; Mr. T. Whiteman, Chepstow; Mr. Steele, Liverpool; Dr. Cresswell; Dr. Anderson, Haydock Lodge; Dr. Sutherland, Castletown; Messrs. Clews & Co., New York; Mr. Stott; Mr. Anderson, Cleator; Miss MacDonald; Mr. Langworthy; Mr. Smith, Lower Gitting; Dr. Jones, Newtown; Mr. MacDowall; Mr. Hammond, Cambridge; Dr. C. Black; Mr. Rodwell; Mr. Cole; Dr. Prospero Sonsino, Florence; Mr. Wilmshurst, Chichester; Mr. Foster; Mr. Mahoney, Newtown; Mr. Jennings, Coleford; Mr. J. Wells; Dr. Haynes, Trowbridge; Dr. Down, Stoke Newington; Mr. Daniell; Dr. Griffith; Dr. Davidson, Chester; Mr. Bateson; Messrs. Peyton & Peyton; Mr. Bryan; Mr. Logg; Mr. Copeman; Dr. Rendle, Trowbridge; Mr. Henry, Oldham; Mr. Allen; Dr. Eaton, Airdrie; Mr. Warren, Tutbury; Mr. Caulfield; Mr. M'Alister; Mr. Wills, Dublin; Mr. Taylor, Glyn Ceiriog; Mr. Dove; Dr. Woodward, Worcester; Dr. Moxey; Mr. Horner; Mr. Hall, Bury St. Edmunds; Mr. Crossman; Mr. Davies, Falmouth; Mr. Brown; Mr. J. Howell, Bray; Dr. Spedding, Belfast; Mr. H. Wilson, Dublin; Mr. Enfield, Kingsbridge; Mr. Stevens, Barnsbury; Mr. Somers, Foot's Cray; Mr. Buck, Alresford; Dr. Le Fevre, Gorey; Mr. Ewing; Dr. Gilland, Wallingford; Mr. Warton, Lytham; Mr. Jardine, Capel; Mr. Sherman, Wellington; Dr. D. Hooper; Mr. Bradbury, Mansfield; Mr. Barker, Rotherham; Mr. Smith, Kinross; Mr. Manton, Dewsbury; Mr. Lane, Rochford; Subscriber; C.; A B. C.; A Young L.R.C.P.L.; TENAX HONORIS; Alpha; A Correspondent; Beta; Henley-on-Thames; A Constant Reader, M.B.; Cantab.; Omicron; &c.

Leeds Mercury, Newcastle Daily Chronicle, County Express, East London Observer, Dublin Evening Mail, Manchester Critic, Isle of Man Times, Journal of the Gynæcological Society, Tavistock Gazette, Battersea and Chelsea News, Saunders's News-Letter, Mansfield Advertiser, Edinburgh Courant, Times (Ottawa), and *Star of Gwent* have been received.

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